

116028EN-06  
2021-08

# Roomie One WiFi Roomie Dual WiFi



## **EN** Assembly and Operation Instructions

Heat recovery single-room reversible ventilation unit

ART. NO.:  
115996  
116000



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## SAFETY REQUIREMENTS

- Read the user's manual carefully prior to installing and operating the unit.
  - All user's manual requirements as well as the provisions of all the applicable local and national construction, electrical, and technical norms and standards must be observed when installing and operating the unit.
  - Disconnect the unit from the power supply prior to any connection, servicing, maintenance, and repair operations.
  - The warnings contained in the user's manual must be considered most seriously since they contain vital personal safety information.
  - Failure to follow the rules and safety precautions noted in this user's manual may result in an injury or unit damage.
  - After a careful reading of the manual, keep it for the entire service life of the unit.
  - While transferring the unit the User's manual must be turned over to the receiving operator.
  - Check the unit for any visible damage of the impeller, the casing, and the grille before starting installation. The casing internals must be free of any foreign objects that can damage the impeller blades.
  - While mounting the unit, avoid compression of the casing! Deformation of the casing may result in motor jam and excessive noise.
  - Misuse of the unit and any unauthorised modifications are not allowed.
  - Do not expose the device to adverse atmospheric agents (rain, sun, etc.).
  - Transported air must not contain any dust or other solid impurities, sticky substances, or fibrous materials.
  - Do not use the unit in a hazardous or explosive environment containing spirits, gasoline, insecticides, etc
  - Do not close or block the intake or extract vents in order to ensure the efficient air flow.
  - Do not sit on the unit and do not put objects on it.
  - The information in this user's manual was correct at the time of the document's preparation.
  - The Company reserves the right to modify the technical characteristics, design, or configuration of its products at any time in order to incorporate the latest technological developments.
  - The connection to the supply mains must be made through a means of disconnection, which is incorporated in the fixed wiring in accordance with the local wiring rules.
  - Precautions must be taken to avoid the back-flow of gases into the room from the open fire of gas or other fuel-burning appliances.
- WARNING! Similar to the use of any other household electrical appliances when operating this fan, the following basic rules must be followed:**
- Never touch the unit with wet or damp hands.
  - If the supply cord is damaged, it must be replaced by the manufacturer, its service agent, or similarly qualified persons in order to avoid a safety hazard.

This user's manual is a main operating document intended for technical, maintenance, and operating staff.

The manual contains information about purpose, technical details, operating principle, design, and installation of the Roomie One Wifi and Roomie Dual Wifi unit and all its modifications.

Technical and maintenance staff must have theoretical and practical training in the field of ventilation systems and should be able to work in accordance with workplace safety rules as well as construction norms and standards applicable in the territory of the country.



**CAUTION!** When a text bears this symbol, it means that personal injury or serious damage to the equipment may result if the instructions are not followed.



**NB!** When a text bears this symbol, damage to equipment or poor efficiency may be the consequence of not following the instructions.



The right to give notice of lack of conformity applies to this product in accordance with the existing terms of sale, provided that the product is used correctly and maintained. Filters are consumables.

The symbol on the product shows that this product must not be treated as household waste. It must be taken to a collection point for recycling electrical and electronic equipment.

By ensuring correct disposal of the equipment, you will contribute to preventing negative consequences for the environment and health that incorrect handling may entail. For further information on recycling of this product, please contact your local authority, your refuse collection company or the company from which you purchased it.

Notice of lack of conformity as a result of incorrect or defective installation must be submitted to the installation company responsible. The right to give notice of lack of conformity may lapse if the system is used incorrectly or maintenance is grossly neglected.

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.

**The product is not suitable for use by children. Children must not be allowed to play with the appliance. Children must not carry out cleaning or maintenance without supervision.**

Our products are subject to continuous development and we therefore reserve the right to make changes.

We also disclaim liability for any printing errors that may occur.

## 1. Purpose

The unit is designed to ensure continuous mechanical air exchange for single rooms in houses, apartments and commercial buildings.

The units are designed for indoor use.

The unit is equipped with a ceramic regenerator that enables supply of fresh filtered air heated by means of extract air heat energy regeneration.

The unit is designed for through-the-wall mounting.



The choice of unit installation location must prevent unauthorized access by unattended children.

The unit is rated for continuous operation.

Transported air must not contain any flammable or explosive mixtures, evaporation of chemicals, sticky substances, fibrous materials, coarse dust, soot and oil particles or environments favourable for the formation of hazardous substances (toxic substances, dust, pathogenic germs).



Turn off the unit if the air temperature is outside the temperature range stated in the technical data.

## 2. Delivery set

Name	Quantity	
	Roomie One WiFi	Roomie Dual WiFi
Indoor unit	1 item	1 item
Air duct	1 item	1 item
Air flow separator	-	3 items
Sound absorbing material	1 item	-
Cartridge assembly	1 item	1 item
Outer ventilation hood	1 item	1 item
Remote control	1 item	1 item
Cardboard template	1 item	1 item
Fastening kit	2 packings	2 packings
User's manual	1 item	1 item
Outer hood installation instruction	1 item	1 item
Packing box	1 item	1 item

### 3. Technical data

The temperature in the room where the indoor unit of the unit is installed must be in the range from +1 °C to +40 °C with relative humidity up to 65% (no condensation buildup). If the conditions for using the ventilator are beyond the specified limits, turn off the ventilator. Provide fresh air supply through windows. The temperature of the transported air should be in the range from -15 °C to +40 °C.

Due to on going developments some models can deviate from what is being described in this manual

The unit is rated as a class II electric appliance.

	Roomie One WiFi			Roomie Dual WiFi		
Speed	I	II	III	I	II	III
Airflow heat recovery mode (m <sup>3</sup> /h)	10	17,5	30	10	20	30
Airflow ventilation mode (m <sup>3</sup> /h)	20	35	60	10	20	30
Airflow exhaust mode (m <sup>3</sup> /h)	-	-	-	20	40	60
Sound pressure Lp(A) 3m dB	17	28	36	20	32	39
Sound power Lw(A) dB	35	45	54	37	49	56
Power consumption (W)	5,1	5,6	7,5	2,9	4,6	6,8
Current (A)	0,018	0,032	0,06	0,031	0,048	0,096
Fan speed (rpm)	1 030	1 760	2 690	1 030	1 760	2 690
Sound absorption D <sub>n,e,w</sub> (C;Ctr)	38 (-1;-5)			35 (-1;-4)		
Voltage (V/50-60 Hz)	100-240 V					
Filter class	G3					
Ingress protection	IP 24					
Operating temperature*	-15 °C to +40 °C					
Wall thickness	240-500 mm			280-500 mm		

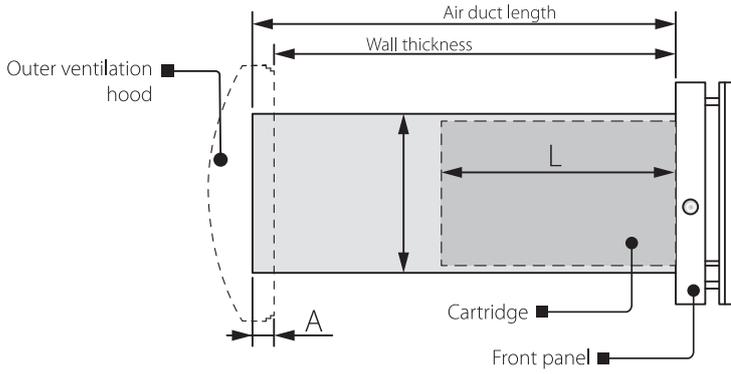
WiFi Technical data	
Standard:	IEFE 802.11 b/g/n
Frequency band [GHz]	2,4
Transmission power [mW] (dBm)	100 (+20)
Network	DHCP
WLAN safety	WPA, WPA2

\*Variations in temperature and humidity may lead to freezing at higher temperatures than specified.

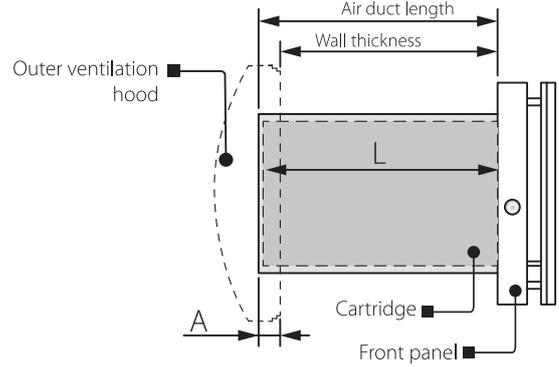
In the event of possible freezing, take the cartridge out with the regenerator and fan. Let it thaw at room temperature. Wait to start the unit if the temperature and humidity conditions are unchanged. Alternatively, chose ventilation mode which reduces indoor humidity and the risk of freezing. The air is then continuously ventilated in one direction.

For Roomie Dual; activating the built-in humidity sensor will activate both fans in exhaust mode at maximum speed until the humidity level is reduced to below set point.

Wall thickness is above the minimum



Wall thickness is minimal

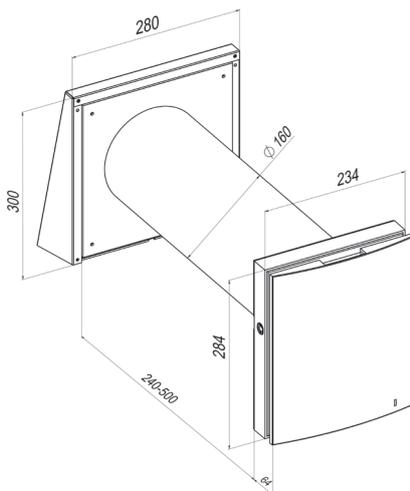


Air duct length [mm]

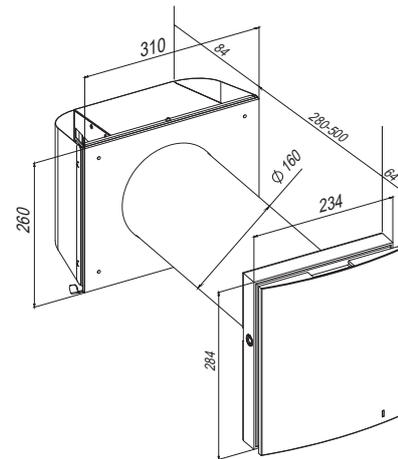
Roomie One WiFi	Roomie Dual WiFi
240(150*)-500	280-500

\* is the minimum air duct length with hood for thinner walls (accessories).

Roomie One WiFi

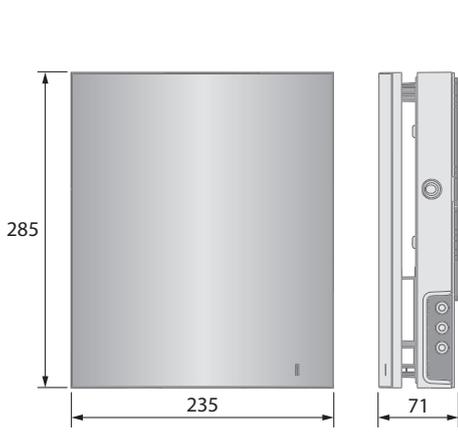


Roomie Dual WiFi

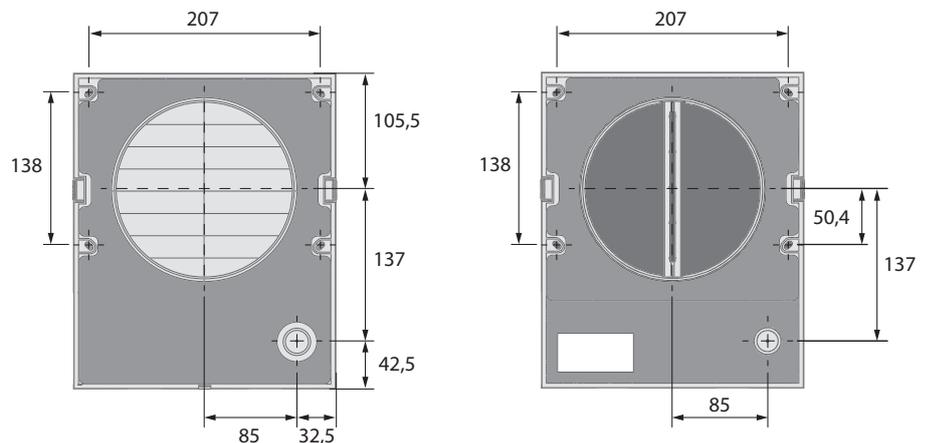


Overall dimensions of the indoor assembly unit [mm]

Roomie One WiFi



Roomie Dual WiFi



## 4. Design and functioning

### Roomie One WiFi

The ventilation unit consists of an indoor assembly unit with a decorative front panel, a cartridge, an air duct with a sound absorbing material and an outer ventilation hood.

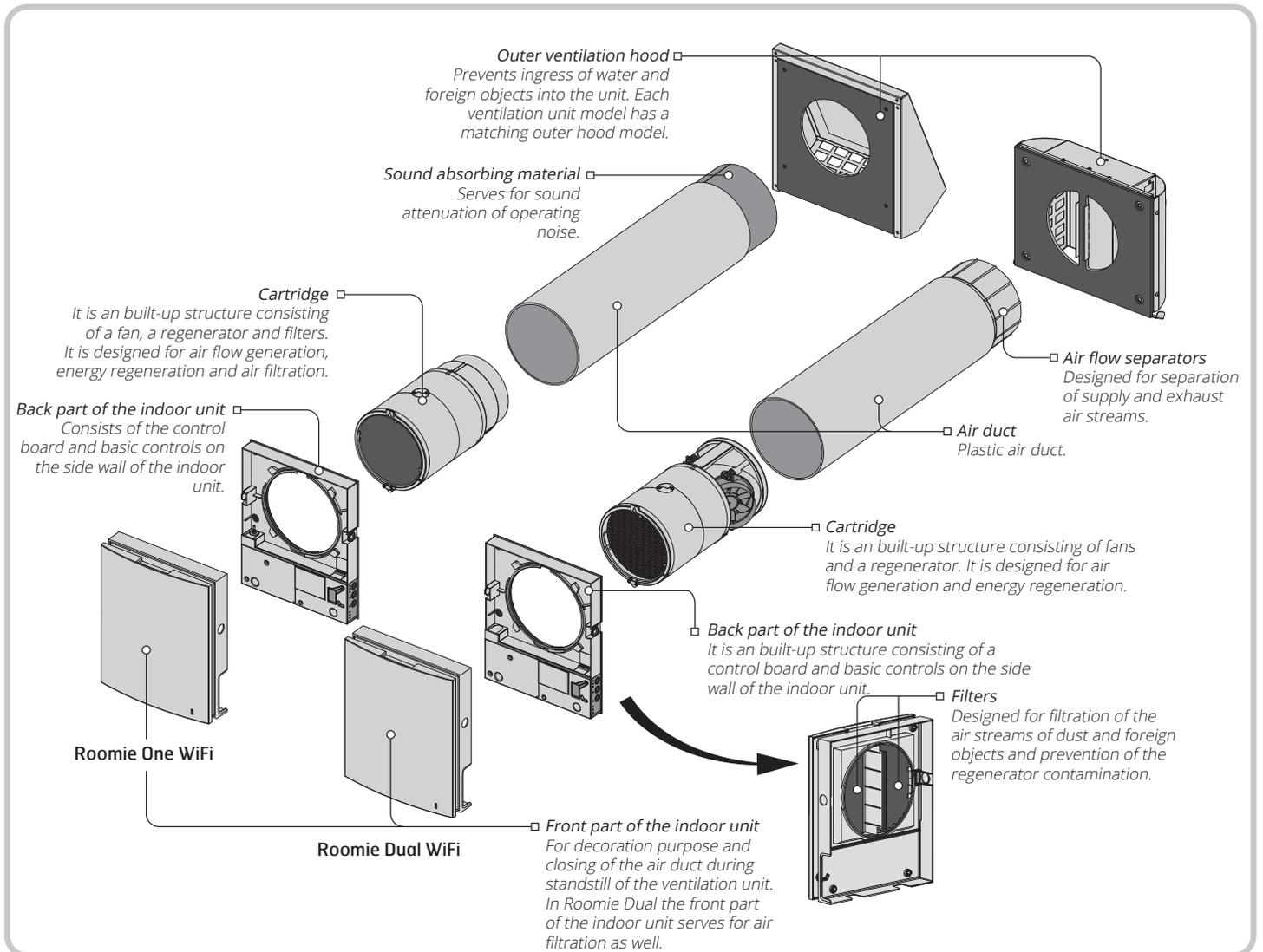
Cartridge is the basic functioning part of the unit. It consists of a fan, a regenerator and two filters that ensure rough air filtration and prevent ingress of dust and foreign objects into the regenerator and the fan. The air shutters in the indoor unit are closed during the unit standstill and prevent back air drafting.

### Roomie Dual WiFi

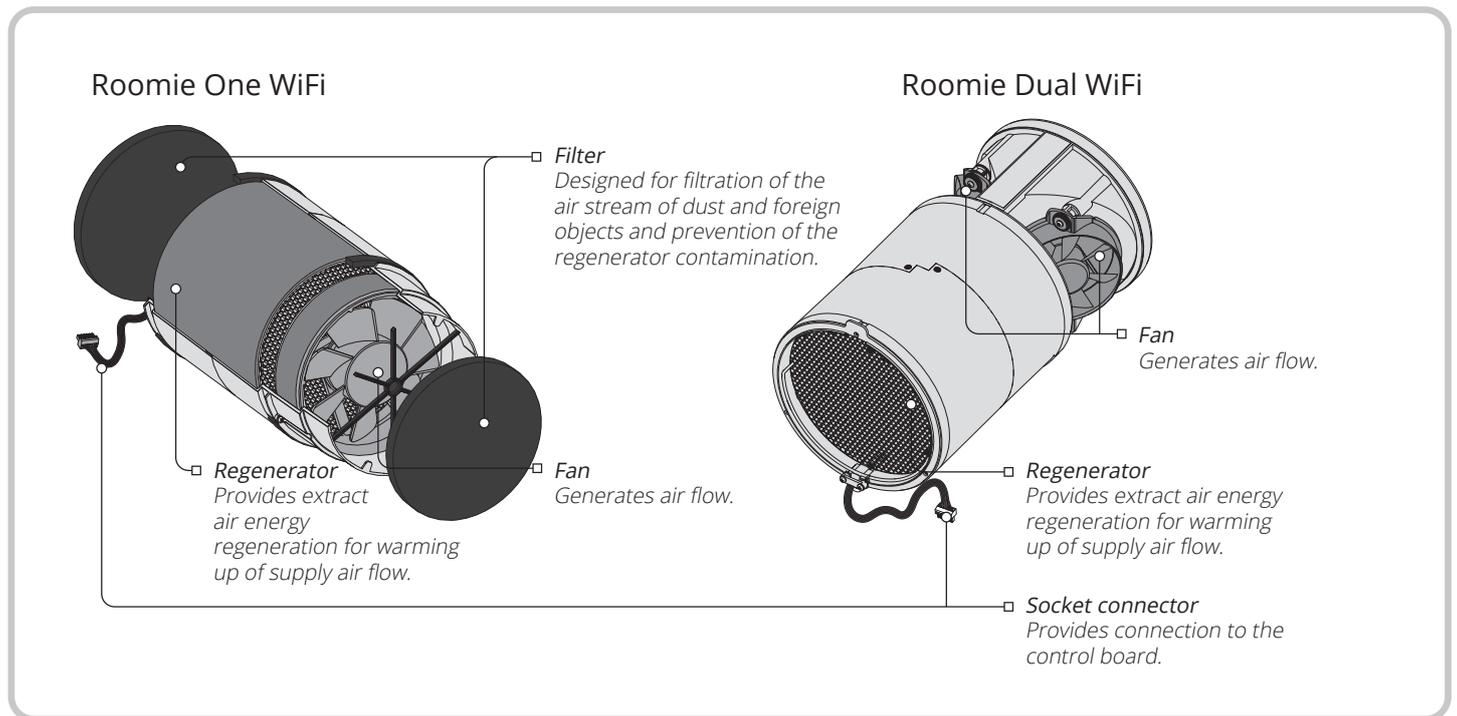
The ventilator consists of an indoor unit with a decorative front panel and filters, a cartridge, an air duct with air flow separators and an outer ventilation hood. The filters ensure rough air filtration and prevent ingress of dust and foreign objects into the cartridge. The cartridge is a basic functioning part of the ventilator. It consists of two fans and a regenerator.

The outer ventilation hood is used to prevent direct ingress of water and other objects to the ventilator.

### Ventilation unit design



## Cartridge design



Cartridge is a solid block and cannot be dismantled.  
Roomie One WiFi has a cartridge with removable filters.  
They are removed for maintenance needs.

A socket connector to be connected to the control board  
in the back part of the indoor unit is routed from the  
cartridge.

## Roomie One WiFi operation modes

Available operation modes of the ventilation unit:

**Regeneration.** The ventilation unit operates in reversible mode with heat and humidity regeneration in two cycles.

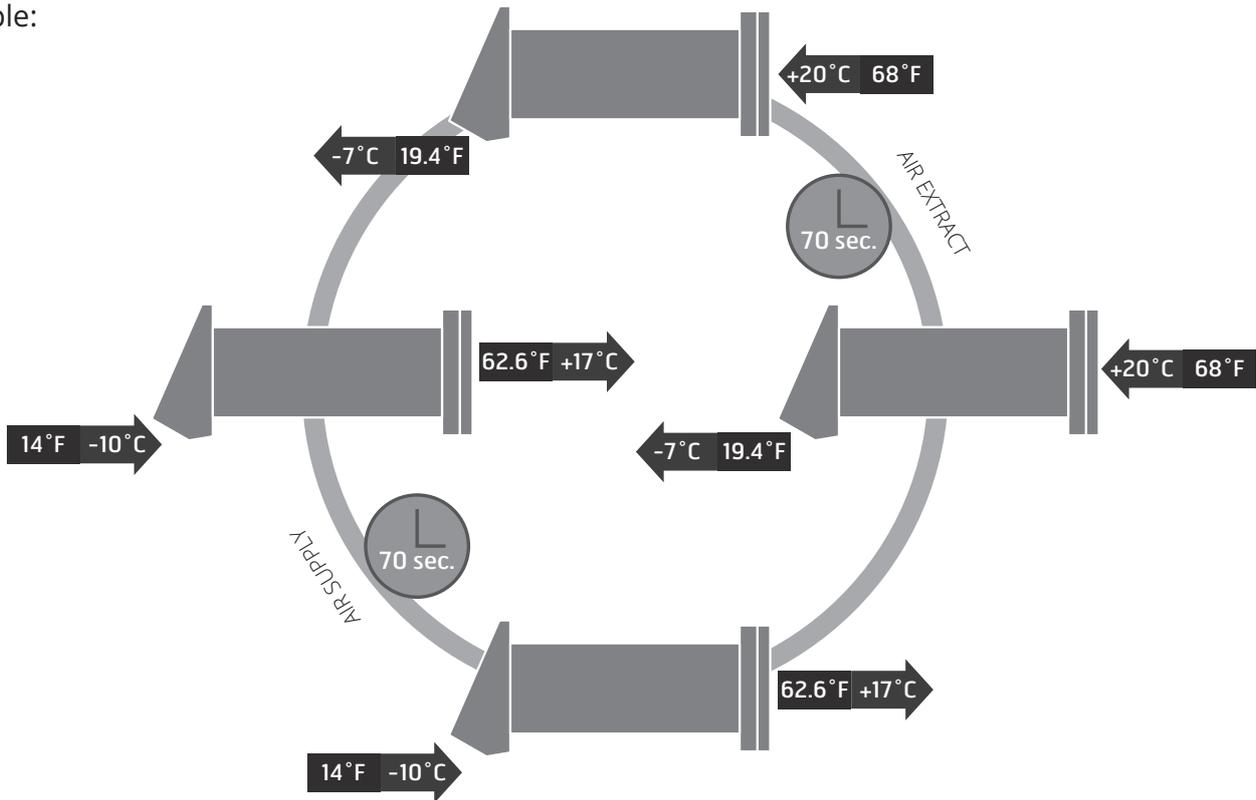
**Cycle I.** Warm stale air is extracted from the room. As it flows through the regenerator, it heats and moisturizes the regenerator, transferring heat energy. In 70 seconds as the ceramic regenerator gets warmed the unit is switched to supply mode.

**Cycle II.** Fresh intake air from outside flows through the ceramic regenerator and absorbs accumulated moisture and heat up to the room temperature. In 70 seconds after cooling of the ceramic regenerator the unit is switched to extract mode and the cycle is renewed.

**Ventilation.** The ventilation unit operates in permanent air supply or air extract mode at set speed.

**Air supply** (available from a mobile device only). All the connected ventilation units in the network switch to air supply mode.

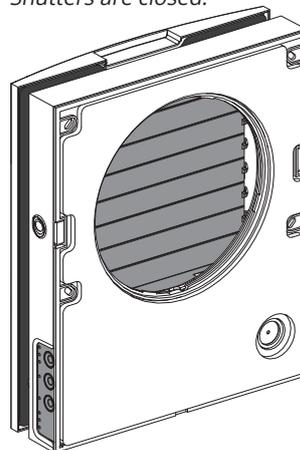
Example:



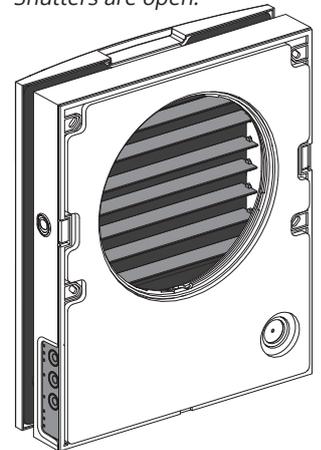
## Functioning of Roomie One WiFi shutters

The indoor unit is equipped with air shutters. During the unit operation the shutters open to let the air stream flow freely through the unit. After the unit shutdown the shutters close within 2 minutes.

Shutters are closed.



Shutters are open.



## Roomie Dual WiFi operation modes

The ventilator has three operation modes:

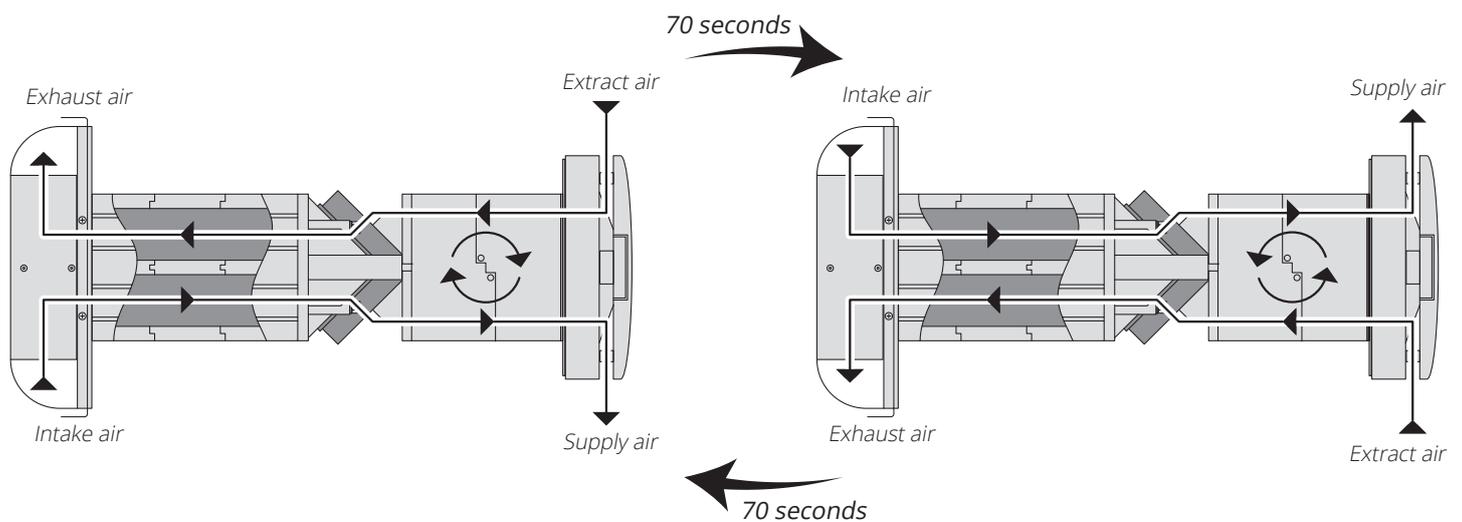
**Regeneration.** One of the fans of the ventilator operates in extract mode and the other one in supply mode. The fans change their rotation direction every 70 seconds.

**Ventilation.** One fan operates in the air extract mode and the other fan operates in the air supply mode at set speed. The fans do not change their rotation direction.

**Air extract.** Both fans operate in air extract mode at set speed.

In case of a sensor activation the ventilation unit follows one of two functioning algorithms to be set during setup of the ventilation unit via PC.

**Supply air** (accessible via app). On activation, both fans provide supply air. This applies to all fans connected in the same network.



## 5. Mounting and set-up



Read the user's manual prior to mounting the unit.

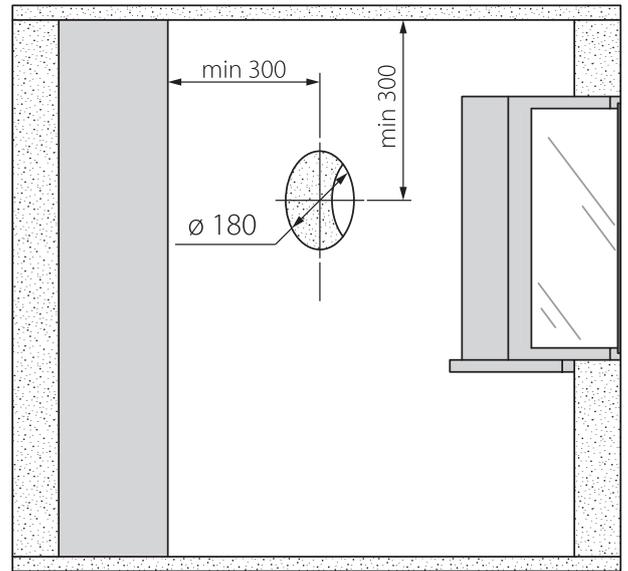


Do not block the air duct of the installed unit with dust accumulating materials, such as curtains, cloth shutters, etc. as it prevents air circulation in the room.



Before you fit the front panel, you must ensure that the stay for the damper is in the lowest position and that the warning lamp is off for at least two minutes.

1. Prepare a round core hole in the outer wall. Recommended hole dimension is  $\varnothing 180$  mm. While preparing a core hole make preparations for layout of the power cable and other required cables. Recommended min. distance to wall/ceiling or other installations which can affect the airflow is 300 mm..



2. Insert the air duct in the wall using the supplied polystyrene wedges. The telescopic air duct end must protrude for the distance that enables installation of the outer ventilation hood.

Install the air duct in the wall in such a way as shown on the left.

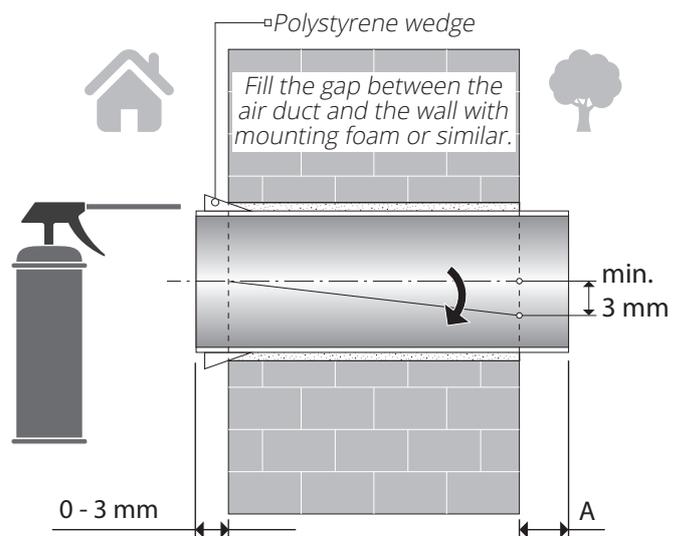
Fit the air duct with at least a 3 mm gradient outwards. On the outer wall side the air duct end must protrude to a distance that enables installation of the outer ventilation hood.

Distance **A**, Roomie One WiFi, max 50 mm\*

Distance **A**, Roomie Dual WiFi, max 0 mm

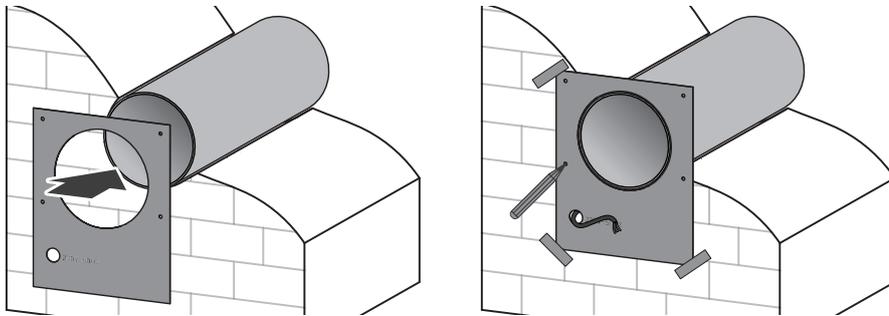
Adjustment of the air duct length is possible before and after fixation of the air duct in the wall. In the first case the required length must be calculated before mounting and in the second case sufficient access must be provided to cut the air duct length after its installation from outside.

Make sure that moisture cannot permeate into the opening in the external wall. Use a suitable sealant.

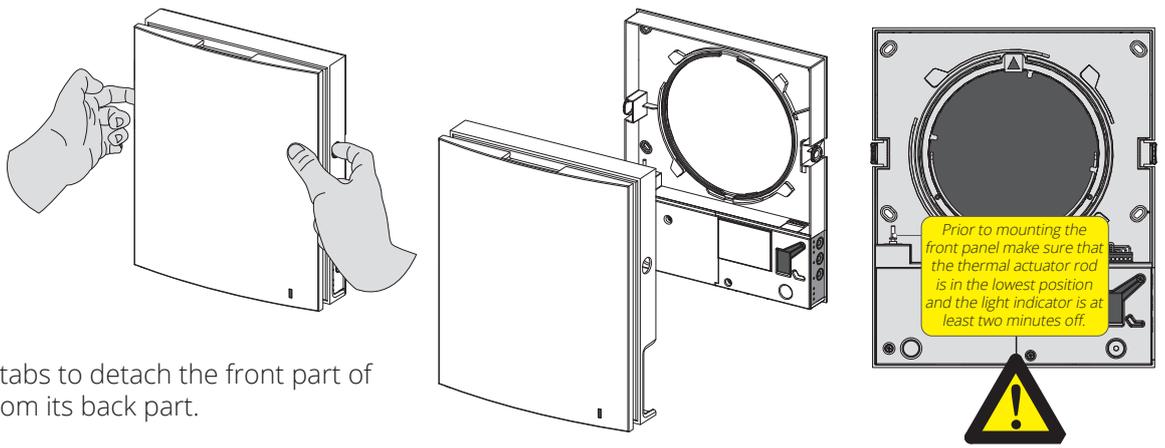
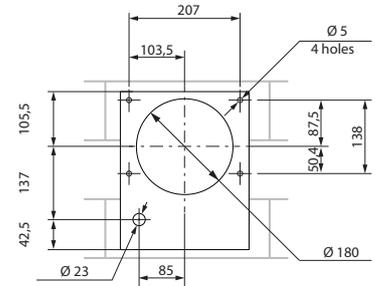


3. Stick the supplied cardboard template on the inner wall using a sticker.  
A big opening must be coaxial with the air duct.  
Use a builder's level for horizontal alignment of the mounting template.

Mark the openings for dowels from the fastening kit and drill holes to a required depth.  
Route the power cable from the ventilation unit outside through the marked opening on the mounting template.



Hole marking for fasteners of the unit, mm

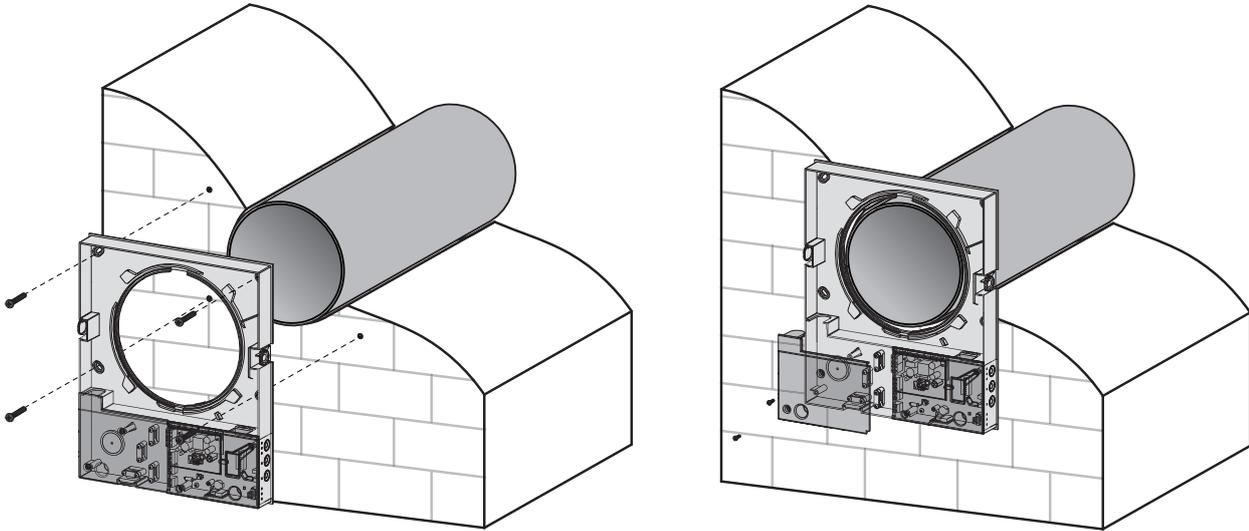


4. Press the side tabs to detach the front part of the indoor unit from its back part.

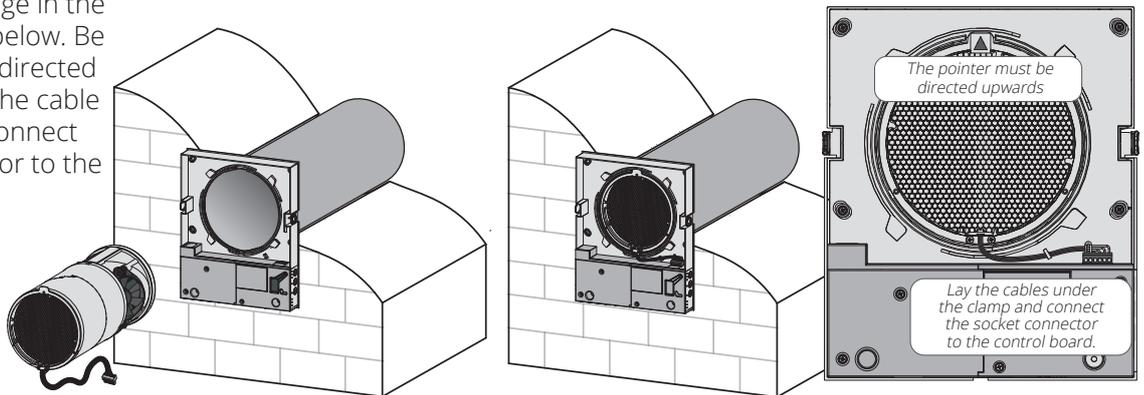
Prior to mounting the front panel make sure that the thermal actuator rod is in the lowest position and the light indicator is at least two minutes off.



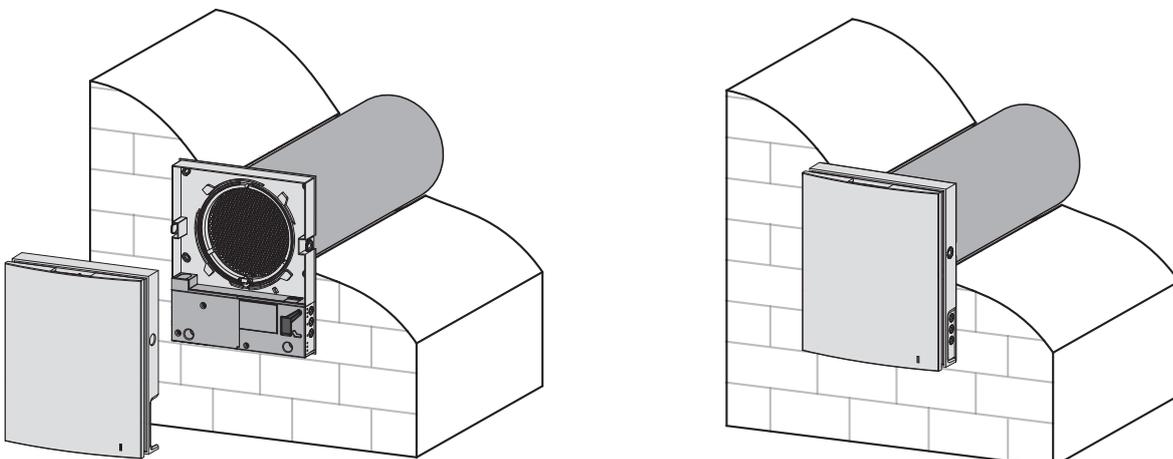
5. Fix the back part of the indoor unit on the wall with the supplied screws. Remove the two screws from the left transparent cover to enable access to the terminals.



6. Insert the cartridge in the air duct as shown below. Be sure the pointer is directed upwards. Then fix the cable with a clamp and connect the socket connector to the control board.

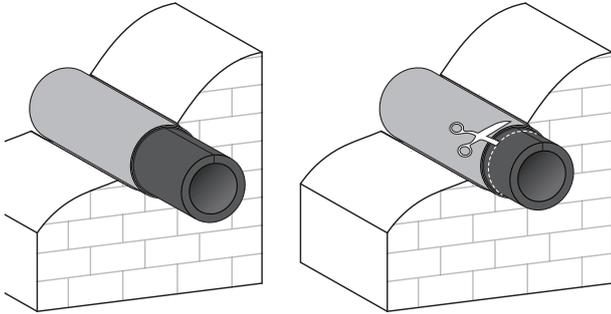


8. Install the front part of the indoor unit.



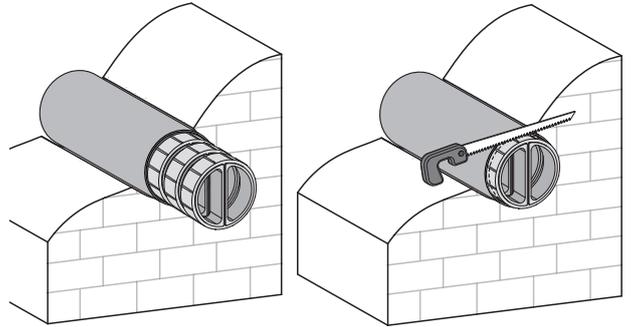
Sound deadening mat

Roomie One WiFi



9. Insert the sound absorbing layer into the air duct. Roll the sound absorbing layer to match the air duct diameter with the protecting paper layer outside. Insert the roll in the air duct against stop against the cartridge. Make a mark at the end of the air duct, remove the material and cut the roll as marked. Insert the ready roll into the air duct.

Roomie Dual WiFi



9. Install the sectional air flow separators from the outside. Install a required quantity of the air flow separators in the air duct until it bumps up the cartridge. Mark the last air flow separator to be flush with the air duct face, remove it from the air duct and cut the excessive part of the last air flow separator. Tighter fixation is provided if the air flow separator protrudes to some distance. Install the adjusted air flow separators to the air duct.

The unit comes with a pre-wired power cable which means that no additional electrical installation is necessary on the unit for it's basic function.



Disconnect the unit from power supply prior to any electric installation operations.

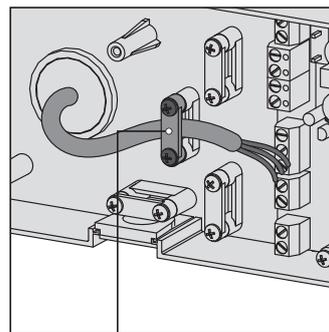


The rated electrical parameters are stated on the rating plate. Any tampering with the external connections is prohibited and will void the warranty.

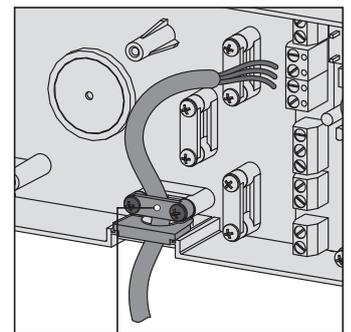


The following installation shall only be performed by a professional electrician according the instruction in the user manual.

**Changing the cable inlet.** It is possible to change the cable inlet from underneath the unit to the back. Any connections in the terminal according to the external wiring diagram.



Cable clamp



Cable clamp

The unit is rated for connection to single-phase AC 100-240 V/ 50-60 Hz power mains.

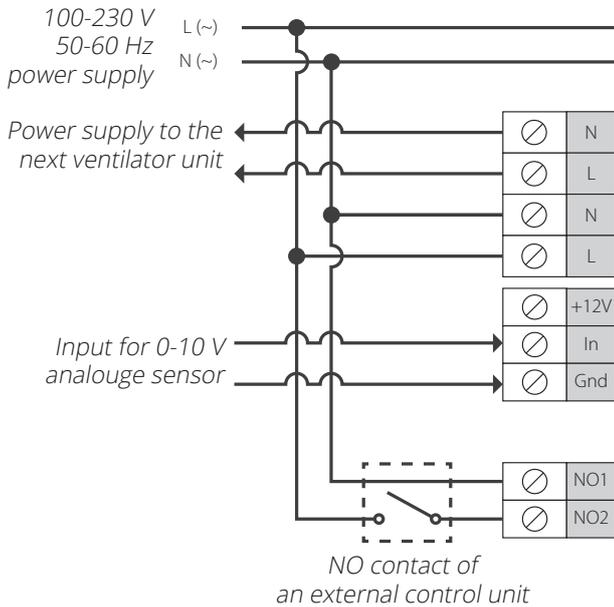
The units shall be installed according to current laws and regulations.

The ventilator design enables connecting any external controls with a normally opened contact (NO-contact), such as an external CO<sub>2</sub> sensor, humidity sensor, relay switch, etc.

When the contacts of the NO contact of the external device are closed, the unit changes to maximum speed.

An analogue sensor with output voltage 0-10 V is also compatible with the unit. When this is activated the ventilator switches to high speed.

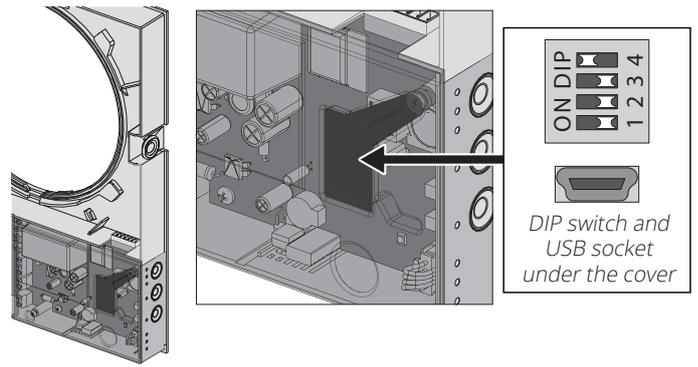
**Wiring diagram**



### Ventilation unit set-up

Connection of PC/use of DIP switches.

You can access the DIP switches and USB socket by removing the front part of the internal part and lifting up the rubber cover.



### Positioning of the dip switch

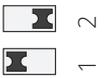
#### Ventilation unit operation mode



##### Configuration of room fan with PC

Switches 1 and 2 must be in the OFF position. Connect a PC using the USB cable supplied. Configuration with a PC is described in detail from page 21. When configuration has been completed, disconnect the USB cable. Switch the power supply to the room fan on, then off and on again to save the settings.

#### Demo mode (demonstration in store, etc.)



**Demo Slave mode:** set the first jumper to ON position and set the second jumper to OFF position. Turn power supply to the unit off and on to apply the parameters.



**Demo Master mode:** set the first and the second jumper to ON position. Turn power supply to the unit off and on to apply the parameters.



**Resetting to factory settings:** set the first jumper to OFF position and the second jumper to ON position. Turn power supply to the unit off and on to apply the parameters. Reset is also possible from a PC.

#### Resetting timer filter



To reset the filter timer set the third jumper to ON position and then revert it to OFF position. This can also be done from a PC.

#### Service mode



**Download mode for the basic software:** set the fourth jumper to OFF position. Turn the power supply to the unit off and on to apply the parameters.

#### Normal operation



**Normal operation of the unit:** set the fourth jumper to ON position. Turn the power supply to the unit off and on to apply the parameters.

**Master unit demo mode**

This mode is for demonstration of the unit operation in a sales shop.

No connection to a PC is required.

In demo mode the unit operates in Master mode with its own wireless access point. Only one Slave unit and three mobile devices may be connected to the wireless access point.

However it is recommended to connect one mobile device only.

Several parallel connected Slave unit in Master demo mode will have the same name and it may result in their conflict.

**Master WiFi name:** Vento.

**Master WiFi password:** 11111111.

**Slave unit demo mode**

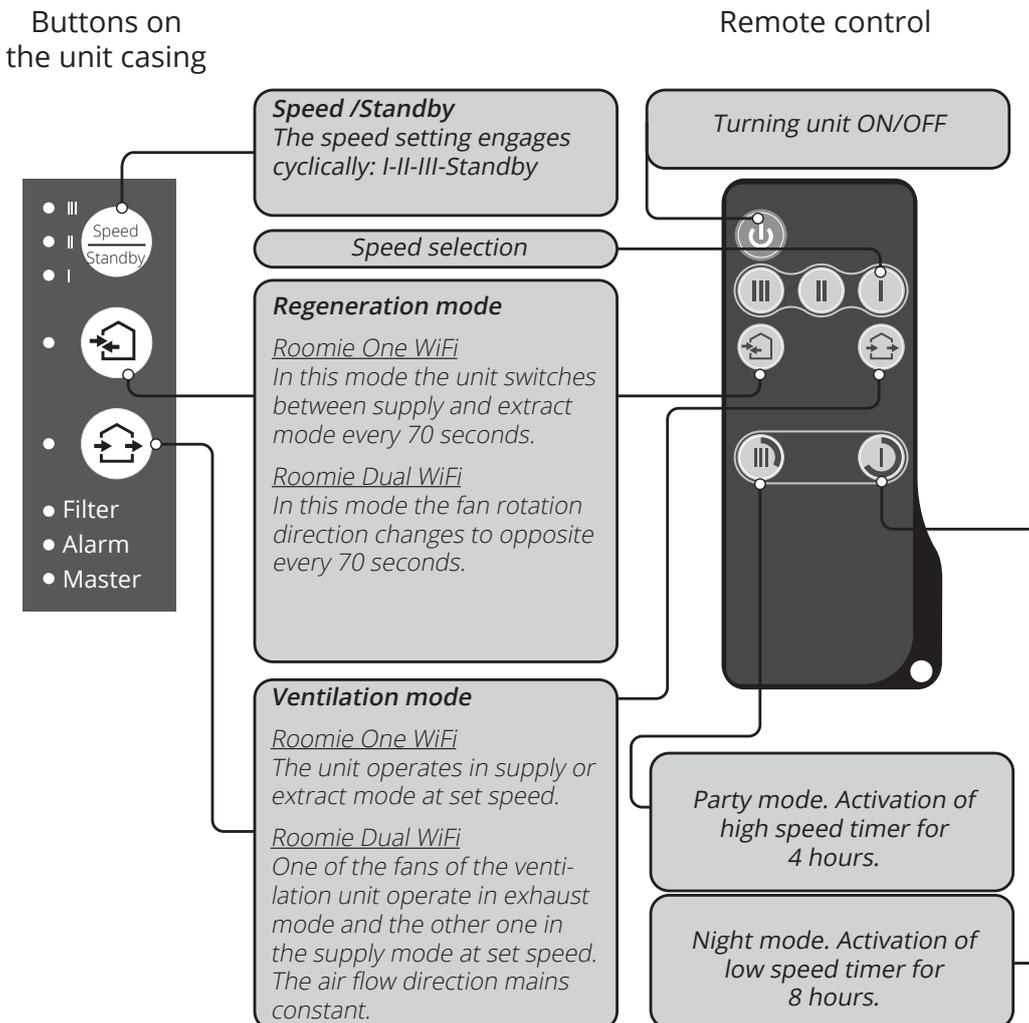
This mode is for demonstration of the unit operation in a sales shop. It is easy to use because of the quick configuration and requires no connection to a PC.

The ventilation unit operates in Slave mode and is automatically connected to a wireless connection point of the Master unit set for demo mode.

**Unit control**

The ventilation unit may be operated with the following controls:

- infra-red remote controller;
- control buttons located on the side wall of the indoor unit. For details, refer to the figure below.
- The application "Flexit Roomie" from a mobile device (smartphone or tablet).



### Operation of the ventilation unit with the buttons on the indoor unit

	<p>The speed selection sequence is as follows: I-II-III-Standby.          All the units integrated in a single network operate according to the speed settings of the Master unit.          I: permanent glowing of the lamp indicator indicates operation of the unit with low speed.          Blinking of the lamp indicates activation of the Night mode timer.          I and II: permanent glowing of the lamp indicators I and II indicates operation of the unit with medium speed.          I, II and III: permanent glowing of the lamp indicators I, II and III indicates operation of the ventilation unit with high speed.          Blinking of the lamp indicators I, II and III indicates activation of the timer for Party mode or the turn-off delay timer triggered by any connected external sensors or the integrated humidity sensor.          Alternate blinking of the lamp indicators I, II and III indicates operation of the ventilation unit at a set speed according to the settings of the connected mobile device.</p>
	<p><b>Regeneration mode</b>  <b>Roomie One WiFi</b> The fan rotation direction changes every 70 seconds.  <b>Roomie Dual WiFi</b> The fans rotation direction changes to opposite every 70 seconds.</p>
	<p><b>Ventilation mode.</b>  <b>Roomie One WiFi</b>          The ventilation unit operates in the supply or extract mode at set speed. The fan rotation direction depends on PC setting (extract mode by default).  <b>Roomie Dual WiFi</b>          One of the fans of the ventilation unit operates in the extract mode and the other one operates in the supply mode at set speed. The air flow direction mains constant.</p>
<p>No glowing of the indicator lamps «Regeneration» and «Ventilation» indicates forced operation of the ventilation unit in the supply mode. This mode may be activated only via the mobile application.</p>	
<b>Filter</b>	<p>Filter replacement indicator. 90 days after installation of the cartridge the filter replacement indicator starts glowing. In this case replace or clean the filters as described in Maintenance section. After replacement of the filters reset the timer using the DIP switch.</p>
<b>Alarm</b>	<p>Alarm indicator for emergency shutdown of the unit. Permanent glowing of the Alarm indicator of the Master unit indicates an alarm in the network of the connected ventilation units. Its blinking indicates shutdown of a specific ventilation unit in the network. In case of an emergency shutdown of a Roomie One WiFi unit in the network the defective ventilation unit is marked with the blinking Alarm indicator. All the connected Roomie One WiFi units are also stopped. In case of an emergency shutdown of a Roomie Dual WiFi unit in the network the defective ventilation unit is marked with the blinking Alarm indicator. The defective ventilation unit shuts down and the other connected ventilation units continue their operation.</p>
<b>Master</b>	<p>Permanent glowing of the lamp indicator indicates the leading unit in the network (Master unit). Blinking of the indicator indicates the driven unit (Slave) and no connection to the Master unit. No glowing of the lamp indicator means that this ventilation unit is a Slave ventilation unit and it is connected to the Master unit.</p>
<p>Synchronous blinking of all the lamp indicators on the casing of the ventilation unit means activated setup mode performed by a PC. In this case the fan shuts down.</p>	

### Remote control of the ventilation unit

	<p>Turning the unit on/off.          The unit may be turned off only if it is enabled by the settings.          Reset of alarm and timer settings.</p>
	<p>Speed selection: high-medium-low respectively.</p>
	<p><b>Regeneration mode.</b>  <b>Roomie One WiFi</b> The fan rotation direction changes every 70 seconds.  <b>Roomie Dual WiFi</b> The fans rotation direction changes to opposite every 70 seconds.</p>
	<p><b>Ventilation mode.</b>  <b>Roomie One WiFi</b>          The ventilation unit operates in the supply or extract mode at set speed. The fan rotation direction depends on PC setting (extract mode by default).  <b>Roomie Dual WiFi</b>          One of the fans of the ventilation unit operates in exhaust mode and the other one operates in the supply mode at set speed. The air flow direction mains constant.</p>
	<p>Timer control button:</p> <p> Party mode: the timer activates operation of the unit at high speed for a set time period, 4 hours by default. The setting may be edited during setup of the unit or using the mobile application.</p> <p> Night mode: the timer activates operation of the ventilation unit at low speed for a set time period, 8 hours by default. The timer setting may be changed during setup of the unit or using the mobile application. The ventilation unit reverts to operation with a previous speed setting upon elapse of the set time period. Press any speed setting key to deactivate the timer or press the timer control button once again.</p>

## When is configuration via a PC required?

### Ventilation unit set-up

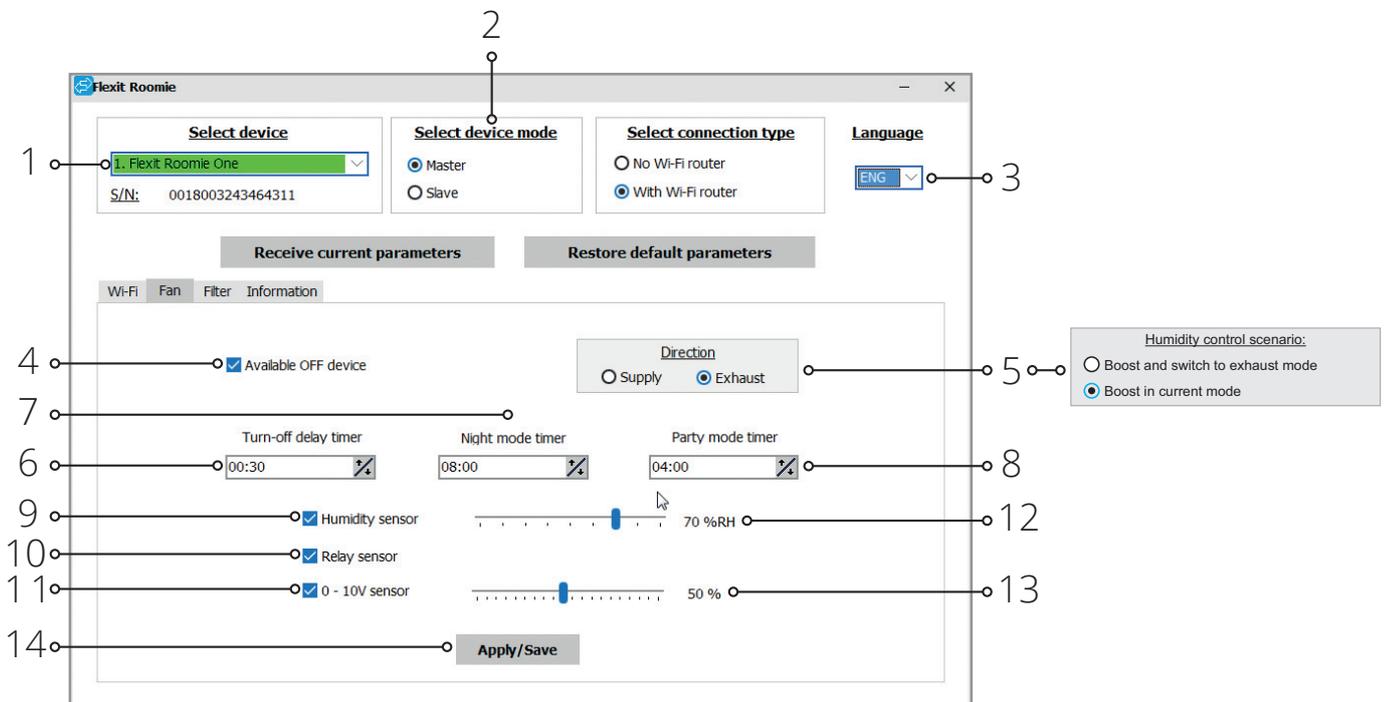
Download and install the software for PC to setup the ventilation unit. The link for downloading is available at: [www.flexit.com](http://www.flexit.com)

Download the **Flexit Roomie app** to control the ventilation unit and install it to your smart phone or tablet at:

Play Market  
App Store

### Connection of the ventilation unit to PC:

- Start the software application **Flexit Roomie** at your PC.
- Take off the front part of the indoor unit for accessing the DIP switch and USB connector on the control board under the rubber cover. For details, please refer to Ventilation unit Setup, page 128.
- Connect the ventilation unit and PC using a USB to mini USB cable.
- Select the menu language prior to starting operation (3). Select a required unit from the dropdown list **Select device**. When a ventilation unit is connected to a PC, the program automatically detects the connected ventilation unit and it is displayed in the dropdown list **Select device**. Select an operation mode for the ventilation unit in the network. Available parameters for the **Master mode**: 4-13. Available parameters for the **Slave mode**: 4-5.



### Unit set-up:

Prior to starting setup of the unit open the tab **Fan**.

- **Receive current parameters:** reading the settings from the connected unit and saving the in the program.
- **Reset factory settings:** resetting the factory settings in the connected unit.
- **Available OFF device (active by default):** enabling/disabling of the unit turning off. The attempt to turn the unit off will turn it to low speed mode. To disable the function uncheck «Available OFF device».
- **Direction (applicable only for Roomie One WiFi):** setting rotation direction of the fan in the **Ventilation mode**.

If several Roomie One WiFi units are integrated in the same network, we recommend setting opposite directions of rotation for the different units.

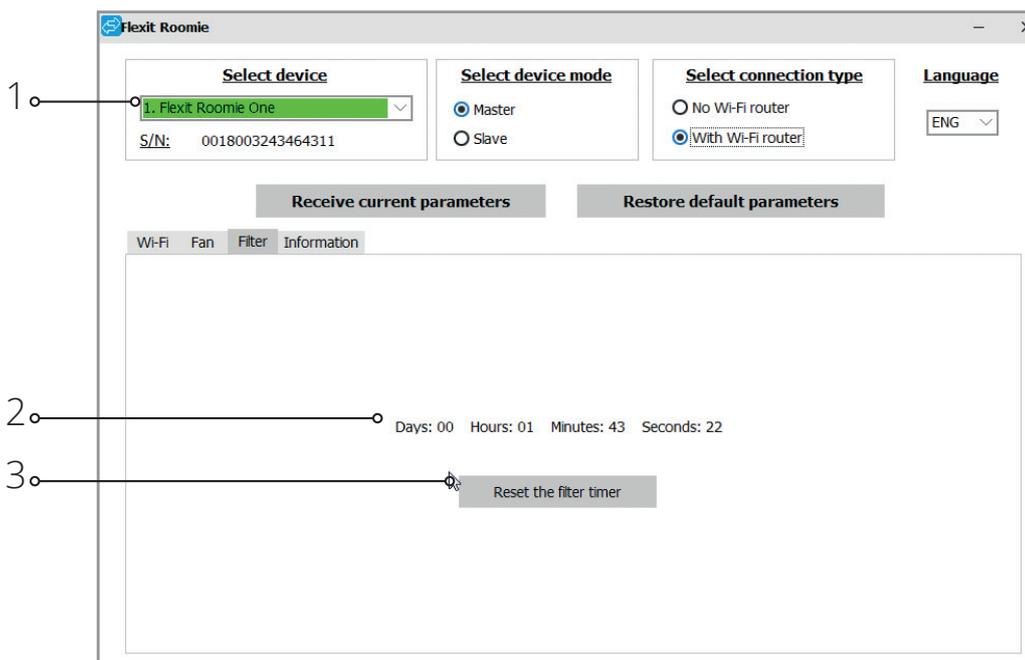
- **Humidity control scenario (for Roomie Dual WiFi):** setting reaction of the ventilation unit for activation of any sensor or the built-in humidity sensor. When choosing exhaust mode both fans extract air.
- **Turn-off delay timer:** setting reset time to a previous operation mode for the ventilation unit after activation of any connected sensors or the built-in humidity sensor.
- **Night mode timer:** setting reset time to a previous operation mode after activation of the night mode, factory setting 8 hours.
- **Party mode timer:** setting changeover time for high-speed mode after activation of the Party mode, factory setting 4 hours.
- **Humidity sensor:** activation of the humidity sensor. When the indoor humidity exceeds the set point (12), the unit changes to the high speed. When the indoor humidity drops down below the set point, the turn-off timer starts

countdown and then the unit changes to the previous speed.

- **Relay sensor:** activation of the external relay sensor. When the no-contact of the external relay sensor is closed, the unit changes to the high speed exhaust mode. When the no-contact is open the turn-off timer starts countdown and then the unit changes to the previous speed.
- **0-10V sensor:** activation of the external analogue sensor 0-10V. When a 0-10V control signal value exceed the set point (13), the ventilation unit changes to the high speed exhaust mode. As the control signal value falls down below the set point, the turn-off timer starts its countdown and upon its elapsing the unit reverts to operation with the previous speed.
- **Apply:** application of all the set parameters in the tab.

## Reset filter timer

- Select the tab **Filter**.
- Press the button **Reset filter timer (3)** to reset the filter timer. After replacement of the filters the operating hours are displayed above the button (2).



## Emergency shutdown of the unit

Emergency shutdown of the unit appears if the fan shutdown lasts above 5 seconds.

In case of emergency shutdown of any **Roomie One WiFi** unit in a chain all the **Roomie One WiFi** units stop. The **Roomie Dual WiFi** units continue to operate.

In case of emergency shutdown of any **Roomie Dual WiFi** unit all the other units in the chain continue to operate.

Alarm is confirmed by a respective alarm indication for all the ventilation units in the network, see page 134.

To reset the alarm indication troubleshoot the fan shutdown and restart the unit using the button on the indoor unit or the remote control.

If the alarm indication is still active, please refer to the Seller.

Cut off power supply to a defective unit to enable operation of the other units in the network.

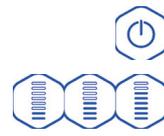
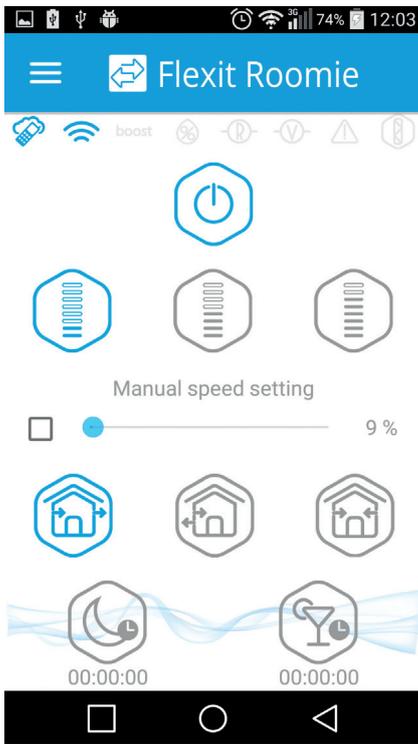
## Ventilation unit operation with the mobile application

To enable operation of the unit with a mobile device install the **Flexit Roomie** application to your mobile device. The application is available for download at **App Store** and **Play Market**.

Your mobile device must have the operation system matching the following parameters:

- **Version 7 or later for iOS. Compatible with iPhone, iPad, iPod.**
- **Version 4 or later for Android.**

After installation of the application turn the unit on and connect your mobile device to a wireless access point. Start the application for operation of the unit at your mobile device. Detailed description of the connection to WiFi read at page 141 and 146.



Turn unit on/off.

Selection of pre-set speed. Low, medium, high speed respectfully.

Manual speed setup. To activate the scroll bar check it.

**Ventilation mode.**

**Roomie One WiFi.** The ventilation unit operates in supply or extract mode at set speed. The fan rotation direction depends on PC setting (exhaust mode by default).

**Roomie Dual WiFi.** One of the fans of the ventilation unit operates in exhaust mode and the other one operates in the supply mode at set speed. The air flow direction remains constant.

**Regeneration mode.**

The fan rotation direction changes every 70 seconds. This mode enables heat recovery.

**Supply mode.** The ventilation unit operates exclusively in supply mode.

**Night mode:** low speed timer activation, by default for 8 hours. The timer setting is set during unit setup via a PC or the mobile application.

**Party mode:** high speed timer activation, by default for 4 hours. The timer setting is set during unit setup via a PC or the mobile application.

Current type of connection to the ventilation unit.

Home connection or connection via a cloud server through Internet respectively.



WiFi connection indicator.



High speed activation indicator. It goes on after activation of any sensor. This mode has higher priority as compared to the Party timer or Night timer mode. When this mode is activated, all the other modes are deactivated. Upon elapse of the turn-off delay timer countdown (from 0 up to 24 hours, factory setting 30 minutes) the ventilation unit reverts to the previous mode. Press Power to deactivate this operation mode.



Humidity indicator. It glows if the indoor humidity is above the set point.



Indicator of external relay sensor. It glows if the external relay sensor is activated.



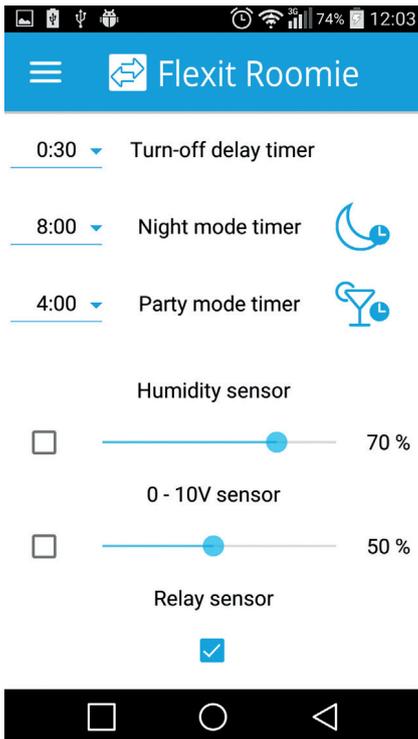
Indicator of external analogue sensor 0-10 V. It glows if a set value of the external sensor is exceeded.



Emergency shutdown indicator. It glows in emergency case.



Indicator button for resetting the filter timer. It glows after 90 days of non-stop operation of the unit. Pressing the button will reset the filter timer of the Master unit only. All the units are equipped with a nonvolatile filter timer. To reset the filter timer of the Slave units set the DIP switch 3 to a respective position or use a downloaded program at your PC.



### Configuration menu

Press the Menu button () to open the configuration menu and select item **Settings**.

This menu settings are similar to the settings described for the software for PC, page 135.

### Wireless connection of several ventilation units

The unit operates in two modes:

**Master.** The unit acts as a leading unit in the network. All the Slave unit and mobile devices are connected to the Master unit via WiFi. The Master unit is operated by means of a mobile device, the remote control or the touch buttons on the unit casing. The control signal is automatically transferred to the connected Slave units. In this mode the unit responds to a signal from sensors, as a humidity sensor, an external digital sensor, an external analogue sensor 0-10V and changes its operation mode respectively.

**Slave.** The unit acts as a driven unit in the network. The Slave unit responds to a signal from the Master unit only. Any other signals from other controls are ignored. In this mode the unit ignores any other signals from the sensors. In case of communication loss with the Master unit above 10 seconds the unit is turned off.

### Operation according to sensors

The Roomie One WiFi units react to sensor signals only in Master mode.

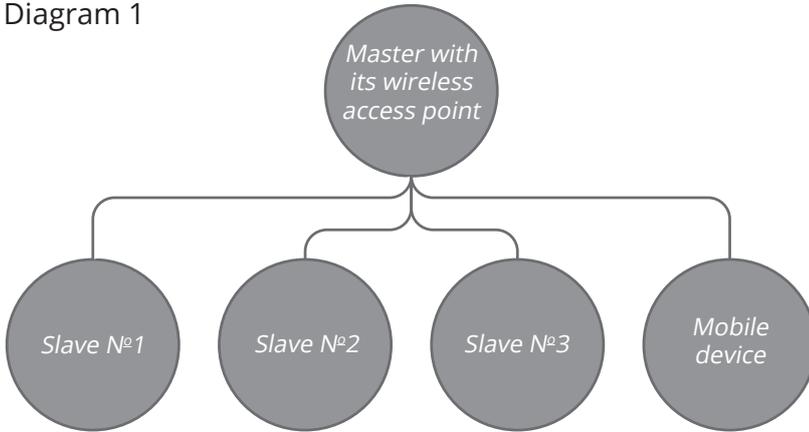
The Roomie Dual WiFi units react to sensor signals in any mode (both Master and Slave mode).

If any sensor is triggered in a chain of Roomie One WiFi ventilation units, all the connected Roomie One WiFi ventilation units in the chain switch to the high speed. The Roomie Dual WiFi ventilation units do not change their speed.

If any sensor is triggered in a chain of Roomie Dual WiFi ventilation units, only the corresponding unit switches to the high speed according to the humidity control scenario. All the other ventilation units do not increase their speed.

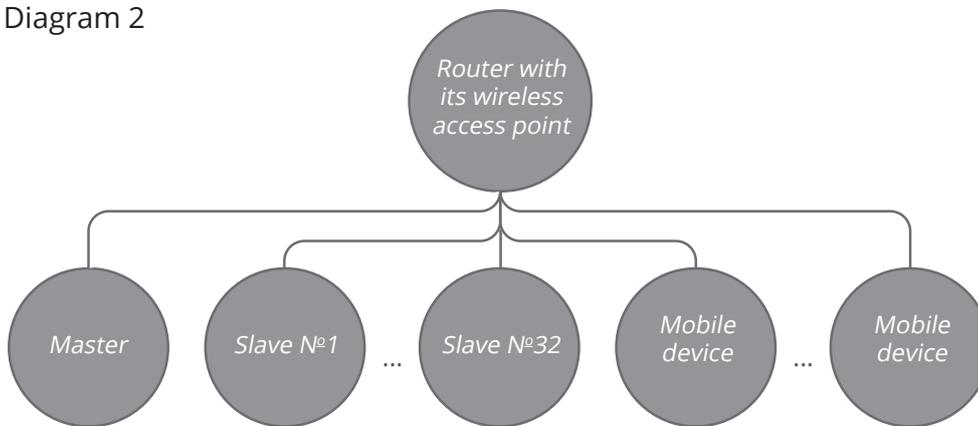
There are two wireless connection options:

Diagram 1

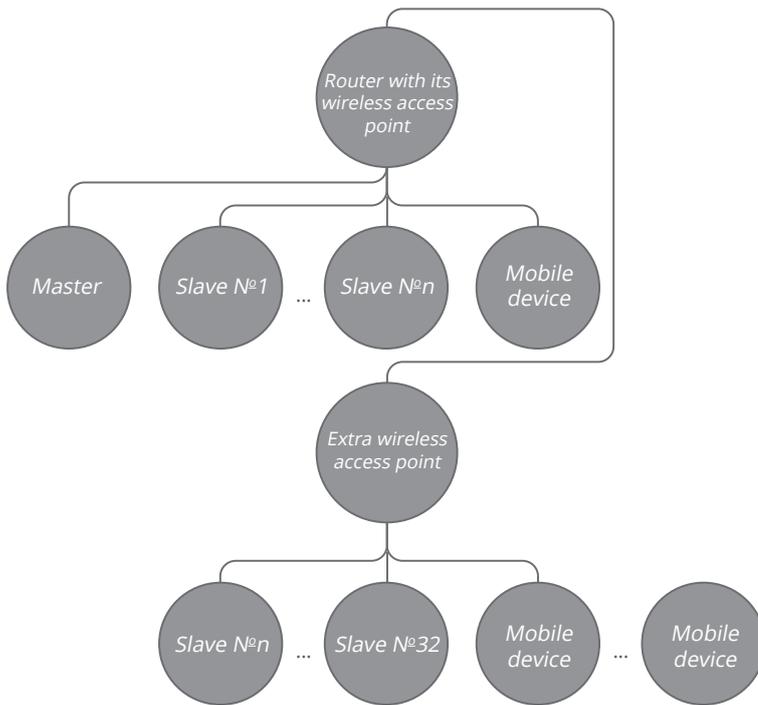


Connection of up to 4 Slave units or mobile devices to the Master unit with its own wireless access point. In case of connection of four Slave units to the Master unit with its own wireless access point a mobile device may not be connected.

Diagram 2



The Master units, the Slave units and the mobile devices are connected to a wireless access point of the WiFi router. In this case the Master unit is able to operate 32 Slave units. Please note that the WiFi routers may have individual limitations for the maximum number of connected devices.



If the WiFi router capacity is not enough to connect a required number of the units, you may use an extra wireless access point to connect the other the unit. Optionally connection of several Master units to the network for arranging a zone control is also possible.

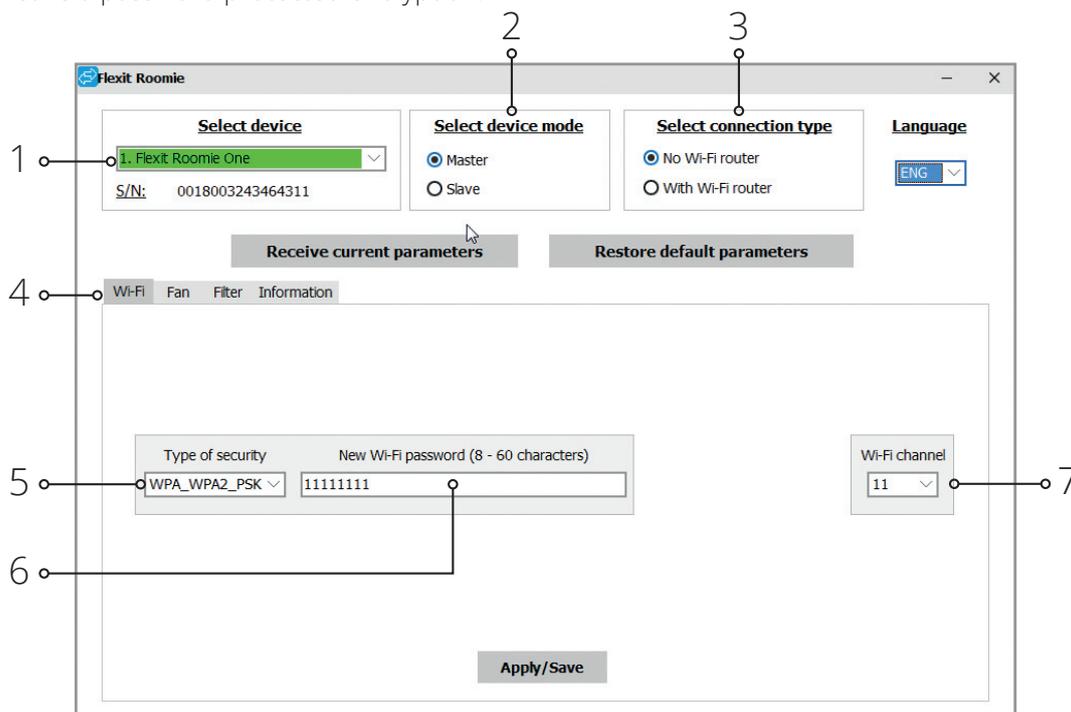
**Configuring the unit in master mode according to the diagram no. 1:**

- Start the software at your PC to set up the unit.
- Connect the unit and PC using a USB to mini USB cable.
- Select a required device from the dropdown list (1).
- Select **Master** for required device mode (2).
- Select **No WiFi router** for the connection type (3).
- Open the tab **WiFi** (4).
- Select the type of security for the Master point (5). It is an optional requirement.
- Open means no password protection.
- WPA\_PSK means a password protected encryption.

- WPA2\_PSK means a password protection encryption.
- WPA\_WPA2\_PSK means a password protection encryption.

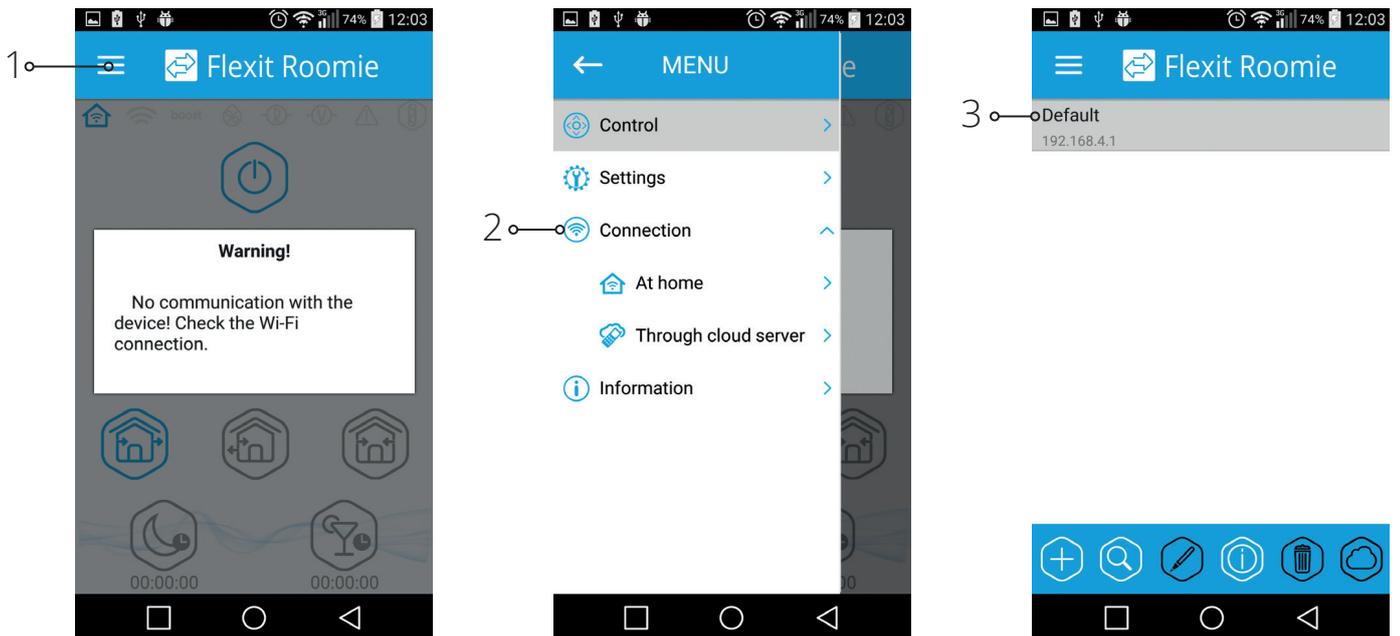
Enter a password for the Master wireless access point (6). The default WiFi password is **11111111**. Select a channel for the Master wireless access point (7). It is an optional requirement. Apply and save the selected parameters (8).

S/N: a unique serial number of the device. It is displayed in the name of the Master wireless access point and is stated on the unit control board.



Connection of a mobile device to the unit according to the diagram no. 1:

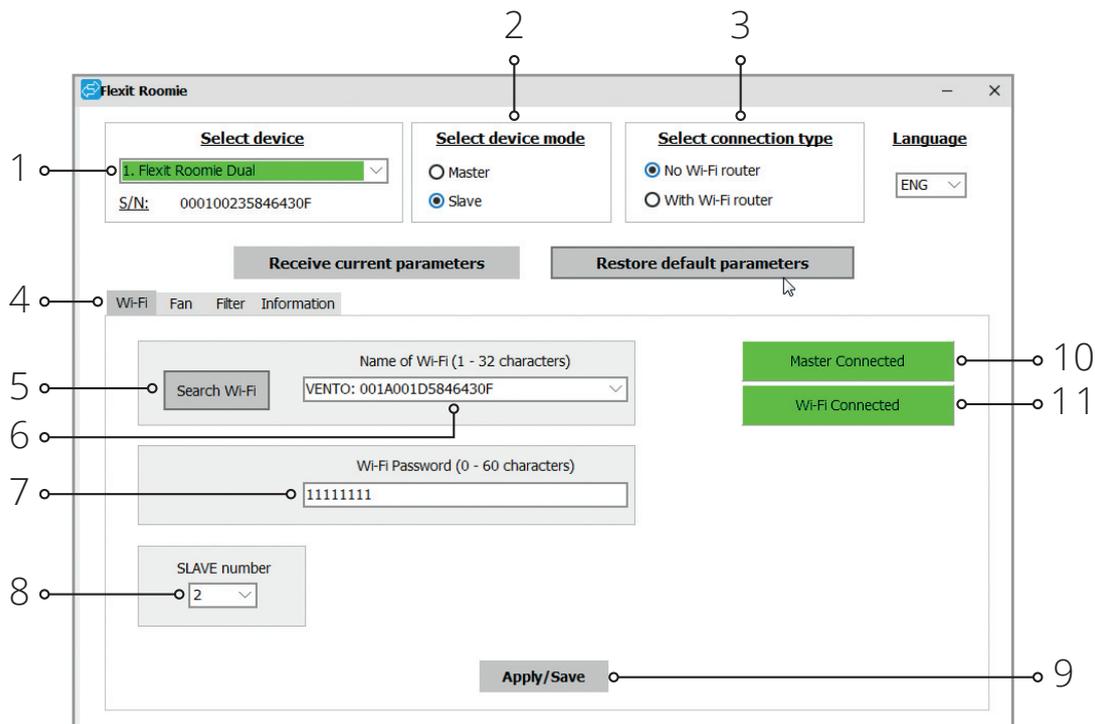
- Install the software to your mobile device.
- Connect the Master unit with configurations according to the diagram No. 1, see page 140.
- Activate WiFi in the system menu for the mobile unit and connect to an available network.
- Connect to WiFi master fan:
  - ☞ WiFi name: «FAN» + 16 characters of the serial number of the Master unit as stated on the control board.
  - ☞ WiFi password by default: 11111111 (editable).



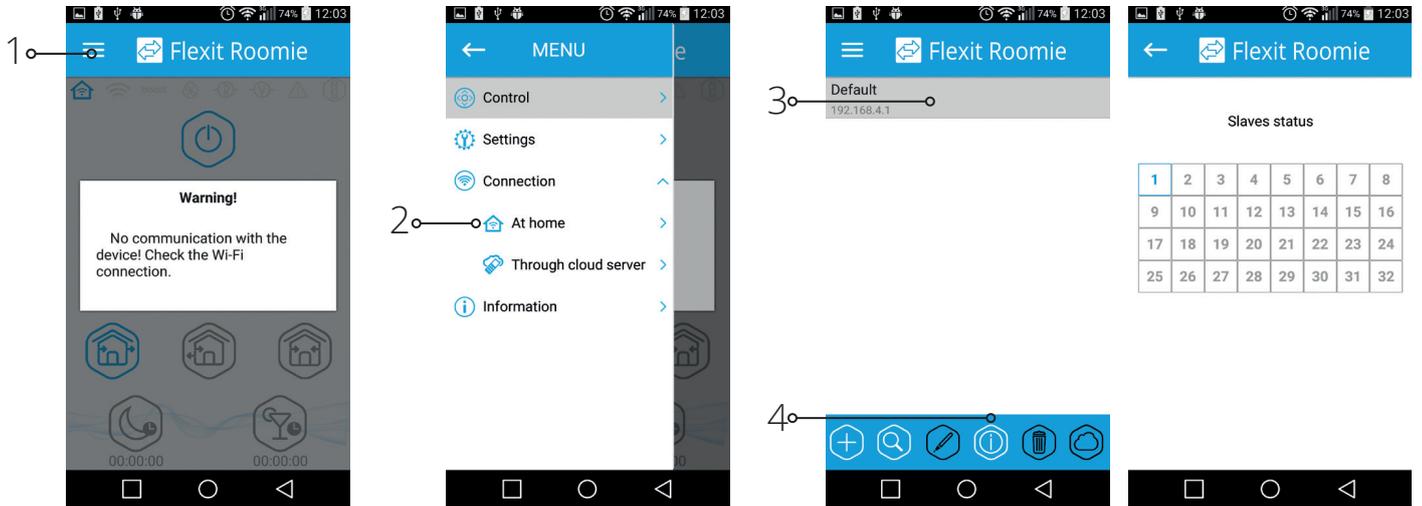
- Start the installed software at your mobile device. In the program menu open the connection page (1-2) and selection the connection type Default (3). The connection name is generated automatically and it can not be edited or deleted. It is specifically designed for connection to a device according to the diagram No. 1.

## Configuring the unit in slave mode according to the diagram no. 1:

- Start the software at your PC to set up the ventilation unit.
- Connect the ventilation unit to PC using a USB to mini USB cable.
- Select a required device from the dropdown list (1).
- Select **Slave** for required device mode (2).
- Select **No WiFi router** for the connection type (3).
- Open the tab **WiFi** (4).
- Press **Search WiFi** for the Master unit (5). It is an optional requirement.
- Enter or select from the list the name of a wireless access point of the Master unit (6). The WiFi name must be as follows: «FAN» + 16 characters of the serial number of the Master unit as stated on the control board.
- Enter the WiFi password of the Master unit (7). WiFi password by default: **11111111**.
- Set a unique Slave number (8).
- Apply and save the selected parameters (9).
- If all the parameters are entered correct and the Master unit is turned on, within 10 seconds the tab (10) is displayed as **Master connected** the tab (11) as **WiFi connected**.



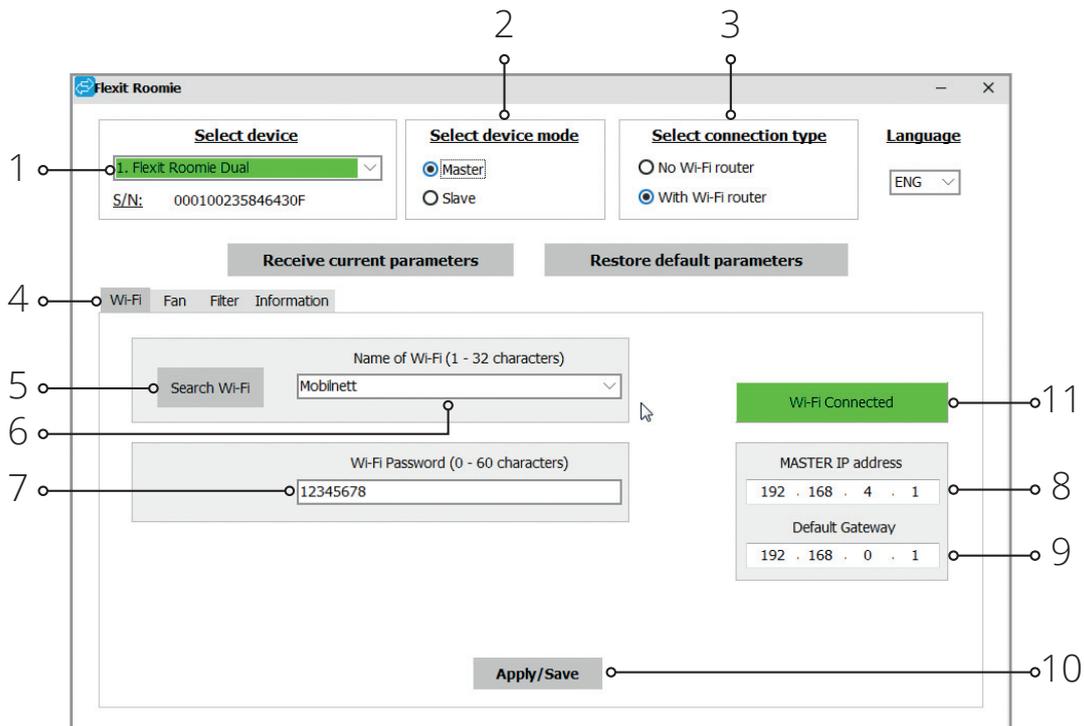
Check the busy numbers using the installed mobile application. For doing that open the connection menu (1-2), select the connection to the Master (3) and open the Slave status (4). All the busy numbers are highlighted yellow.



**Configuring the unit in master mode according to the diagram no. 2:**

- Start the software at your PC to set up the unit.
- Connect the ventilation unit to PC using a USB to mini USB cable.
- Select a required device from the dropdown list (1).
- Select **Master** for required device mode (2).
- Select **with WiFi router** for the connection type (3).
- Open the tab **WiFi** (4)
- Press **Search WiFi** (5). It is an optional requirement.
- Enter or select from the list the name of a wireless access point of the router (6).
- Enter WiFi password for the router (7).

- Set a free IP address for the Master unit (8). The IP address must be consistent with the current network and be unique. Detection of a free IP address is described below.
- Apply «**Standard gateway**» for the Master unit (9). It must match the IP-address of the router.
- Apply and save the selected parameters (10).
- If all the parameters are entered correct and the WiFi router point is turned on, within 10 seconds the tab (11) is displayed as **WiFi connected**.



### Detection of a free IP address for the Master unit and standard gateway address is as follows:

1. Open the window of the command line: press combination Win+R and enter «cmd» in the appeared window «Run», then press Enter.
2. Select the command «ipconfig» in the appeared window and press Enter.
3. The line «Basic gateway» indicates the router IP-address. Example: «Basic gateway . . . . . : 192.168.0.1»
4. Enter this address in the field «Basic gateway» (9) in the programme for setup of the ventilation unit.

5. Detect a free IP address for the Master unit: enter the command «ping» in the command line, IP-address of the router, change the fourth address field from 1 to 254 and press Enter until the line «This unit is not available» appears. Example: «ping 192.168.0.2»+»Enter».
6. Enter the selected available address in the field «Master IP address» for setup of the ventilation unit.

### Configuring the unit in slave mode according to the diagram no. 2:

- Start the software at your PC to set up the unit.
- Connect the ventilation unit to PC using a USB to mini USB cable.
- Select a required device from the dropdown list (1).
- Select **Slave** for required device mode (2).
- Select **With WiFi router** for the connection type (3).
- Open the tab **WiFi** (4).
- Press **Search WiFi** (5). It is an optional requirement.
- Enter or select from the list the name of a wireless access point of the router (6).
- Enter WiFi password for the router (7).
- Set a unique number for each Slave unit (8) from 1 to 32 in the consequent order. Check the busy numbers using the installed mobile application, see page 143.
- Enter the IP address of the Master unit (10) as the Slave unit should be connected to.

- Set the Slave IP address (9). It is an optional requirement.
  - **Set DHCP** to enable automatic assigning of the IP address during connection to router.
  - **Set Static** to enable manual assigning of the IP address for the Slave unit. The assigned address must be consistent with the current network and be unique. Detection of a free IP address is described below.
- Apply and save the selected parameters (11).
- If all the parameters are entered correct and the Master unit is turned on, within 10 seconds the tab (12) is displayed as **Master connected** and the tab (13) as **WiFi connected**.

Detection of a free IP address for the Slave unit is as follows:

1. PC: Open the window in the command line: press Win + R and enter «cmd» in the «Run» window. Then press Enter.
2. Enter «ipconfig» in the window that opens, and press Enter.
3. The «Standard gateway» line indicates the router's IP address. Example: «Standard gateway. . . . . : 192.168.0.1».
4. Identify a free IP address for the slave fan: enter «ping» in the command line + the router's IP address, but change the fourth address field with a number from 1 to 254 and press Enter until the line «The unit entered is not available» appears. This means that the IP address is free. For example «ping 192.168.0.3» + «Enter».
5. Enter the selected free address in the «Slave IP address» (9) field to configure the room fan.

## Connection of a mobile device to the unit according to the diagram no. 2:

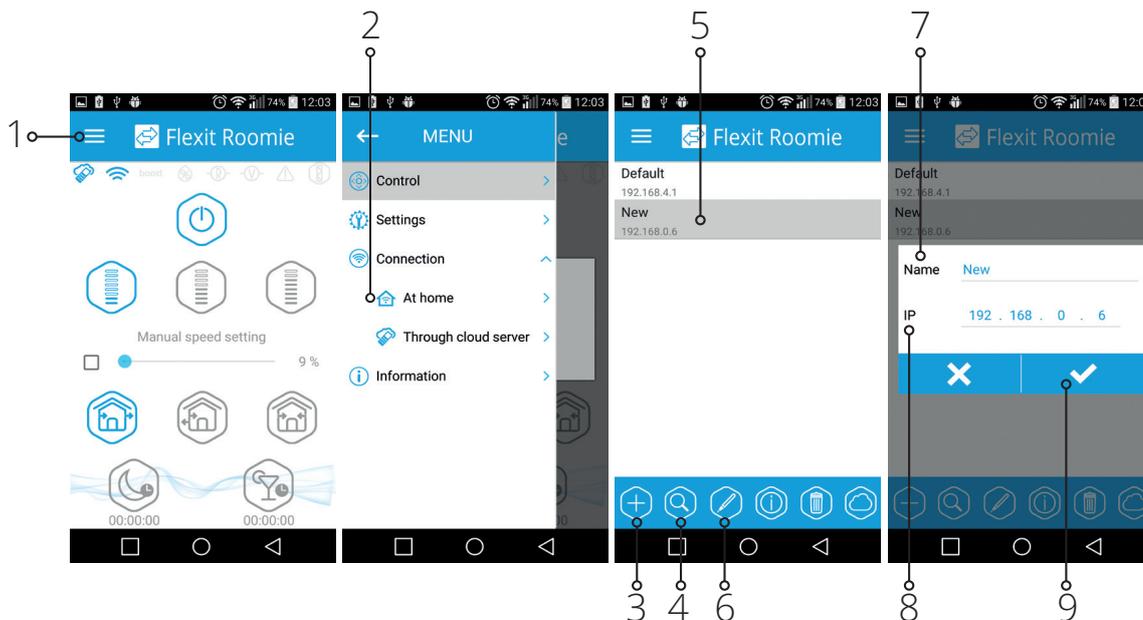
- Install the software to your mobile device.
- Connect the Master unit with configurations according to the diagram No. 2.
- Activate WiFi in the system menu of the mobile device.
- Connect to the same network as the room fan:
- Set the installed mobile application.
- In the menu program, open the connection page (1-2) and create a new connection.

### Manual connection:

- Press the button (3) to add new connection.
- Enter the connection name (7).
- Enter the Master IP address (8).
- Press the button (9) to confirm.

### Automatic connection:

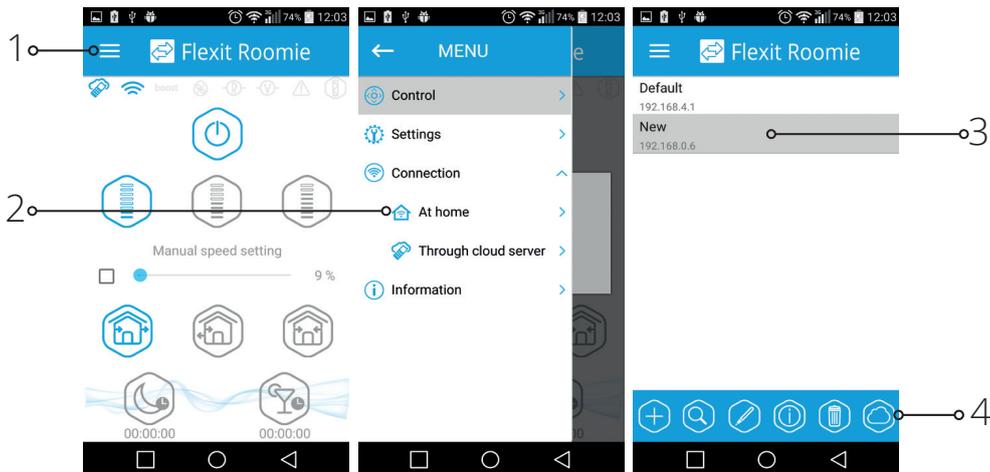
- Press the button (4) to search new Master units.
- Connect the mobile device to the detected Master unit displayed as New (5).
- Press the button (6) to edit the connection.
- Enter the connection name (7).
- Press the button (9) to confirm.



## Operating the ventilation unit through the cloud server

The Master unit must be set for the operation mode in compliance with the diagram No. 2. By default the control function through the cloud server is off. It must be activated in the following way:

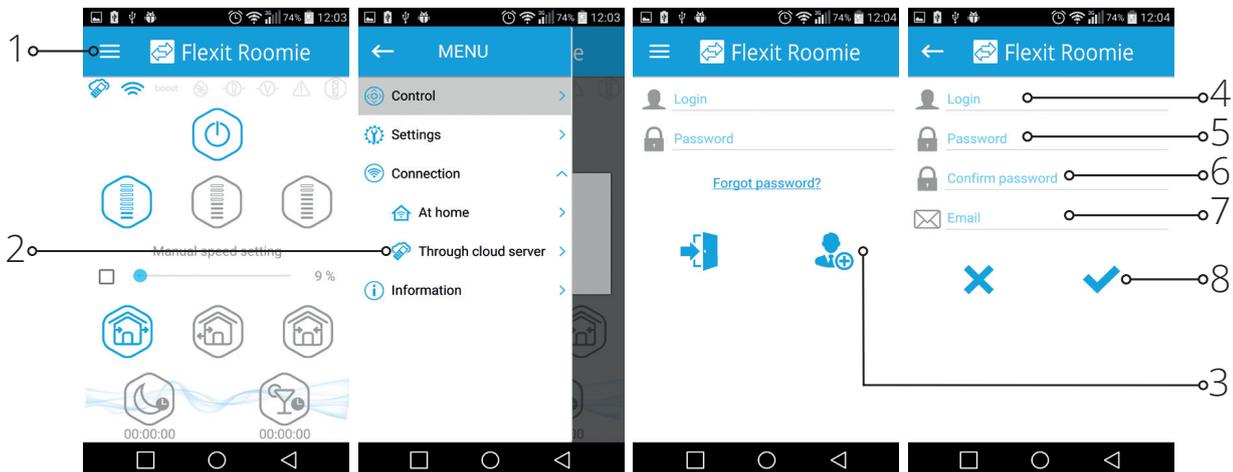
- Connect to the Wi-Fi point of the home router in the system menu of the mobile device.
- Start the application in the mobile device.
- Open the page of the home connection (1-2) in the program menu.
- Select the required connection (3).
- Activate the control function through the cloud server (4).



**Note:** The function depends on the internet connection.

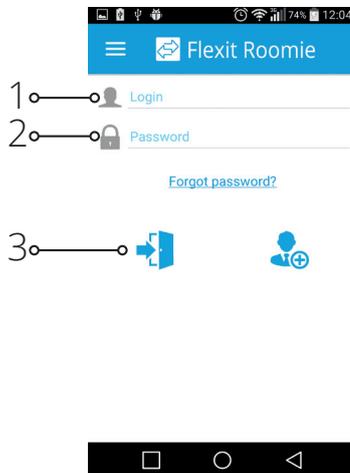
Creating new account:

- In the menu program open page of connection through the cloud server (1-2).
- Enter the account generation menu (3).
- Enter your login (4) and password (5), enter your password again (6) and your Email (7).
- Press the button (8) to confirm.



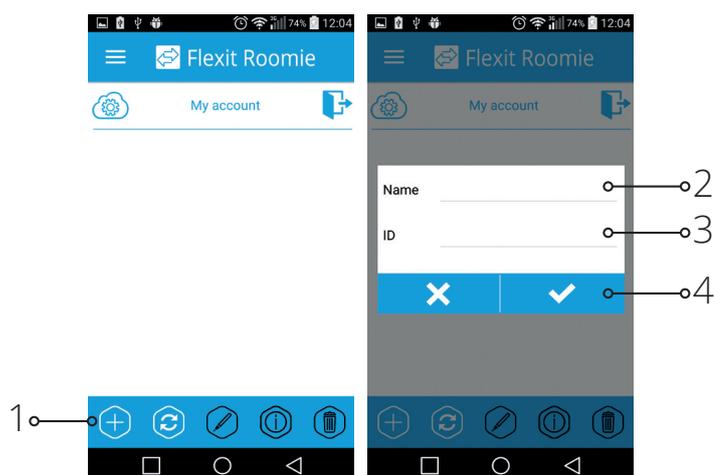
## Entering account:

- Enter your login (1) and password (2) on the page of connection through the cloud server.
- Press the button (3) to enter the account.



## Adding new connection:

- Press the button (1) to add the new connection at the page of connection through the cloud server.
- Enter the connection name (2).
- Enter ID number of the Master unit (3) containing of 16 symbols of the serial number indicated on the circuit board of the Master unit.
- Press the button (4) to confirm.

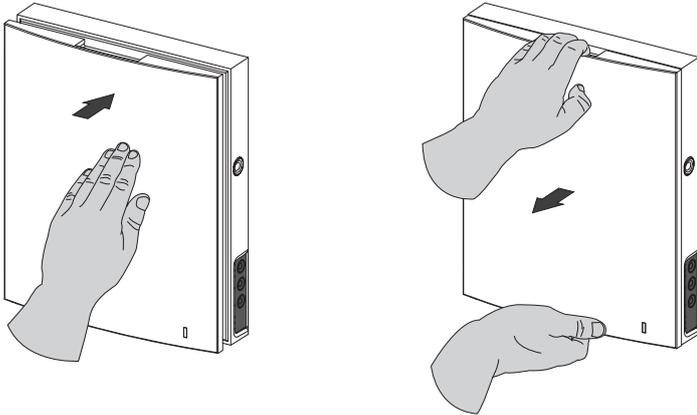


**Air flow blocking:**

**Roomie One WiFi**

Press the front panel to close the air duct. The fan is stopped. The unit functionality is not changed.

To open the air duct pull the front panel through the specially designed recessions. The fan starts operating according to the actual speed setting.



The light operating indicator is located on the front panel.

In the night time the indicator glowing goes down.

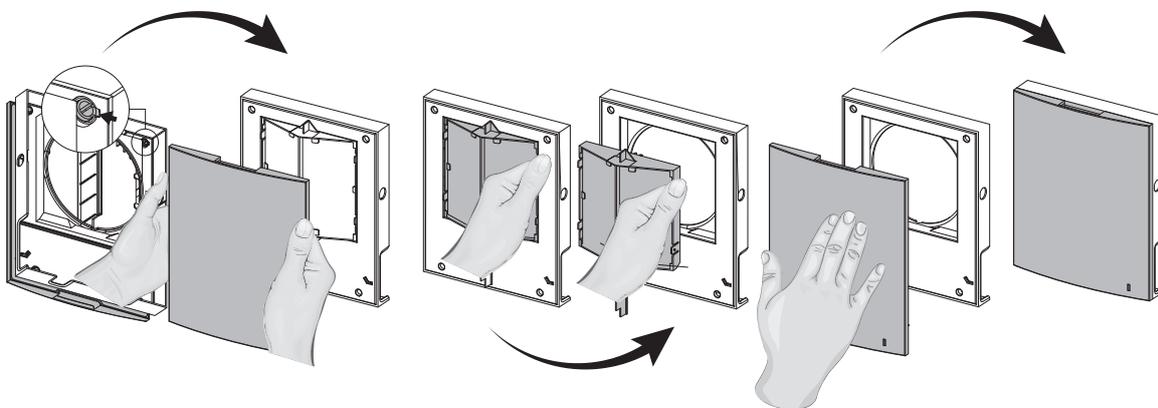
**Air flow blocking for Roomie Dual WiFi**

Press the side tabs to detach the front part of the indoor unit from its back part and close the air duct. Then open the latches and remove the front part of the front panel. Remove the air flow separator by pulling one of the side clamps. Install the front part of the front panel and press it gently to close the air duct.

The fan turns off automatically. The unit functionality is not changed.

Open the air duct in the reverse order.

The fan starts operating according to the actual speed setting.



The front panel incorporates an operating LED indicator. During the night the indicator light intensity drops down.

## 6. Maintenance



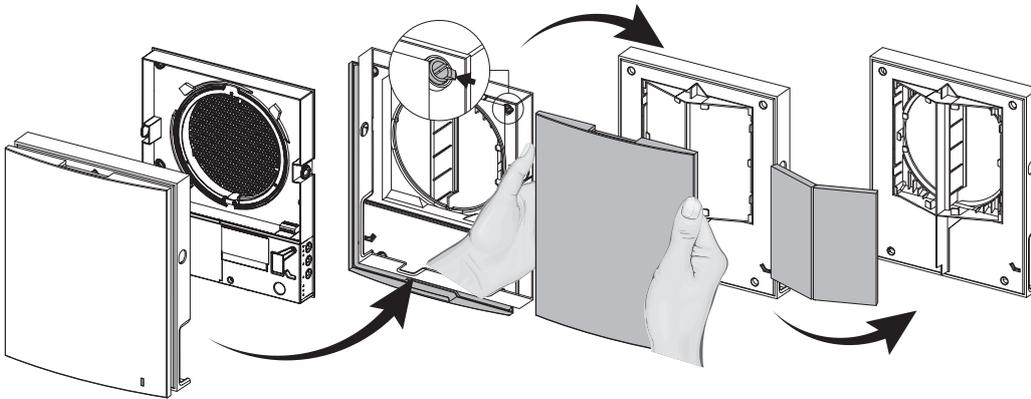
Disconnect the unit from power supply before any maintenance operations.

Maintenance of the ventilator means regular cleaning of the ventilator surfaces of dust and cleaning and replacement of the filters.

To access the basic assembly units follow the steps: Turn off the unit using the remote control or the buttons on the indoor unit.

### Roomie Dual WiFi

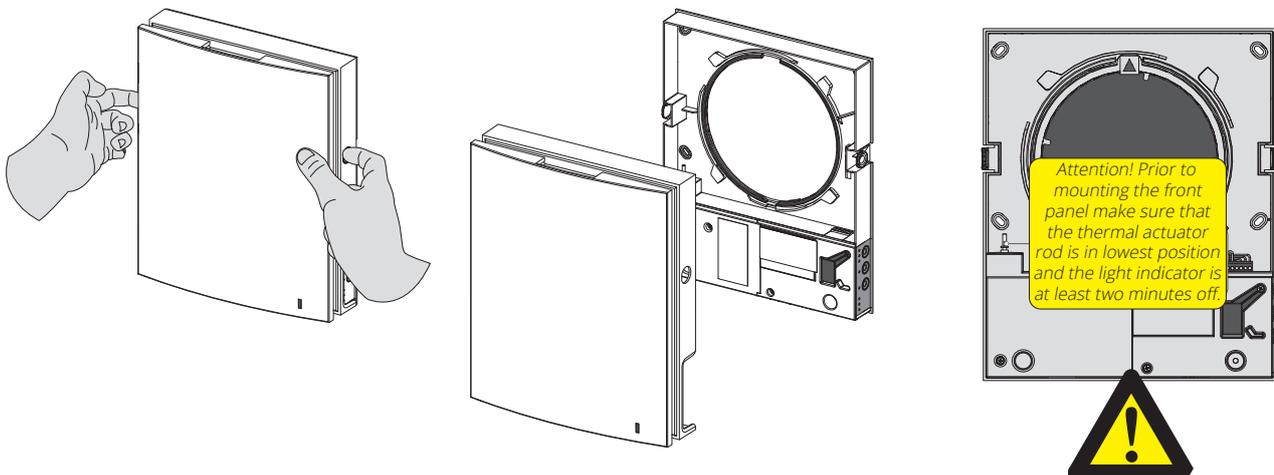
1. Press the latches on the side of the indoor control unit to take off the front part. Then open the latches and remove the front part of the front panel. Remove the filters for cleaning. Reverse the above procedures to reassemble.



### Roomie One WiFi

1. Press the side tabs to release the front part of the indoor unit.

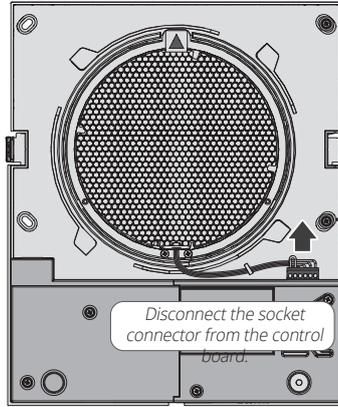
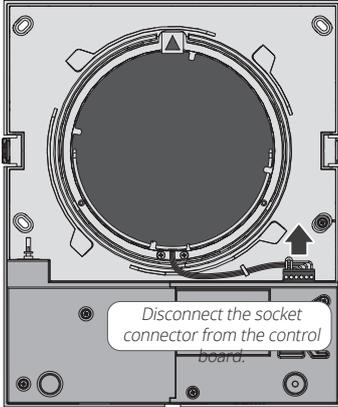
Please make sure the thermal actuator rod is in lower position during re-installation of the front panel. If the thermal actuator rod is up, please wait about 2 minutes until it goes down.



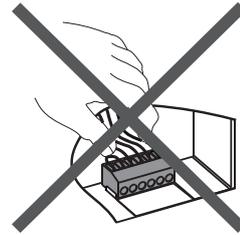
2. Remove the socket connector from the control board. Do not remove the socket connector by pulling the wires. Use a flat screwdriver to uplift it.

Roomie One WiFi

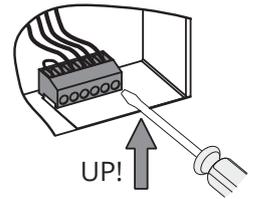
Roomie Dual WiFi



Do not pull the wires!



Use a flat screwdriver to disconnect the socket.

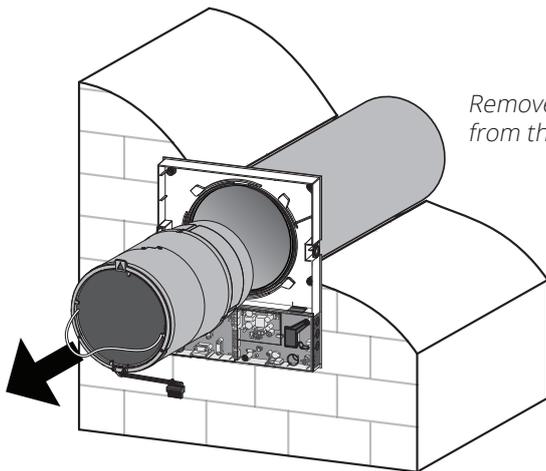


**Never remove the control board!  
It may cause an alarm!**

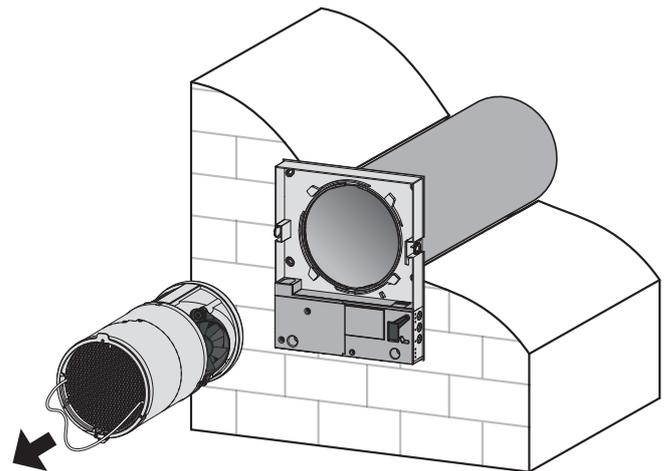
3. Pull the band to remove the cartridge.

Roomie One WiFi

Roomie Dual WiFi

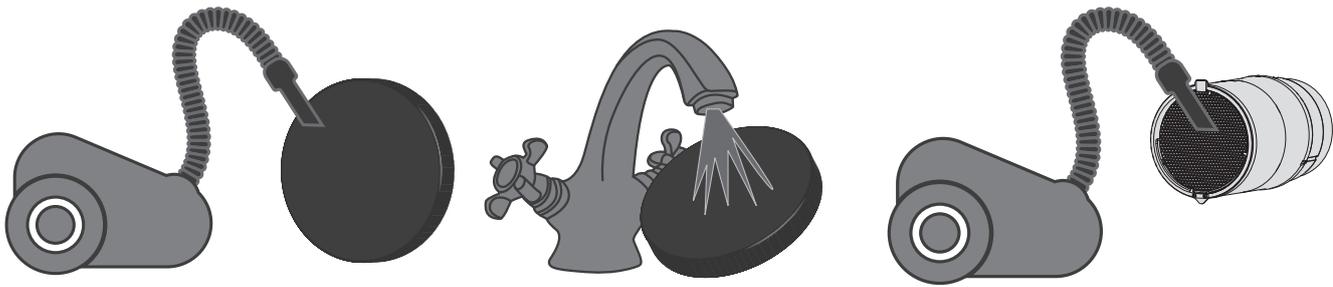


Remove the filters from the cartridge.



- Clean the filters as often as required, but at least 3 times a year.
- Upon elapse of the set time period (factory setting 90 days) the filter replacement indicator (Filter) starts glowing.
  - Resetting of the filter timer settings is performed with the DIP switch on the control board or using

- the application at your PC, see page 136 or mobile device.
- Wash the filters and let those dry out completely.
  - Install the dry filters in the air duct.
  - Vacuum cleaning is allowed.
  - The filter rated service life is 3 years.



Even regular technical maintenance may not completely prevent dirt accumulation on the regenerator and the fan.

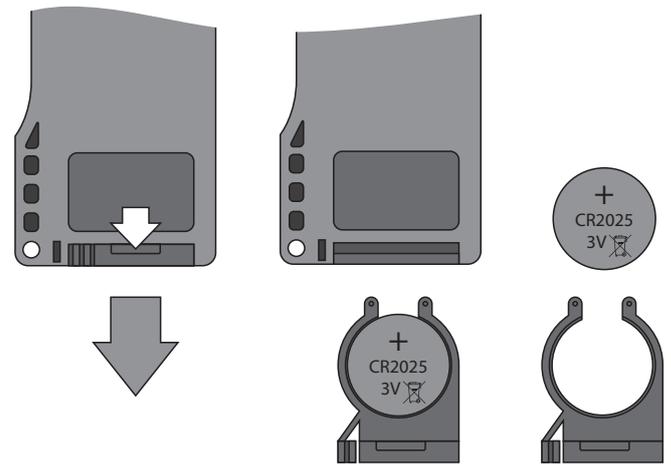
- Clean the regenerator regularly to ensure its high heat recovery efficiency.
- Clean the regenerator with a vacuum cleaner at least once in a year.

4. Battery replacement in the remote control (as required).

In case of a long operation of the remote control the battery must be replaced. No response of the unit for pressing the remote control buttons indicates the need to replace the battery.

The battery type is CR2025.

Remove the holder with the battery from the lower part of the remote control. Then replace the battery and re-install the holder with a new battery in site.



## 7. Troubleshooting

Problem	Possible reasons	Troubleshooting
The fan does not move up during start-up of the unit.	No power supply.	Make sure that the ventilation unit is properly connected to power mains and troubleshoot a connection error, if required.
	Motor is jammed, the impeller blades are clogged.	Turn the ventilation unit off. Troubleshoot the motor jam and impeller clogging. Clean the blades. Restart the unit.
Circuit breaker tripping during the ventilation unit start-up.	Overcurrent as a result of short circuit in the electric circuit.	Turn the unit off. Contact the Seller for further information.
Low air flow.	Low set fan speed.	Set higher speed.
	The filter is clogged, the fan or the regenerator is contaminated.	Clean or replace the filter. Clean the fan and the regenerator.
High noise, vibration.	The impeller is contaminated.	Clean the impeller.
	Loose screw connection of the unit casing or the outer ventilation hood.	Tighten the screws of the unit or the outer ventilation hood.

## 8. Storage and transportation regulations

Store the unit in the manufacturer's original packing box in a dry closed ventilated premise with temperature range from +5 °C to + 40 °C.

Storage environment must not contain aggressive vapours and chemical mixtures provoking corrosion, insulation and sealing deformation.

Follow the handling requirements applicable for the particular type of cargo.

The unit can be transported in the original packing by any mode of transport without limitation provided proper protection against precipitation and mechanical damage.

Avoid sharp blows, scratches or rough handling during loading and unloading.



Prior to the initial power-up after transportation at subzero temperatures allow the unit to warm up at room temperature for at least 2 hours.

## 9. CE Declaration of conformity

This declaration confirms that the products meet the requirements in the following Council Directives and standards:

2014/30/EC Electromagnetic compatibility (EMC)

2014/35/EC Low-voltage Directive (LVD)

93/68/EEC CE-marking Directive on the approximation of the laws of the Member States relating to electromagnetic compatibility.

Producer: VENTILATION SYSTEMS PrJSC  
1, Mikhaila Kotzubinskogo St., Kiev, 01030,  
Ukraine

Type: Single-room ventilators;  
Roomie One Wifi  
Roomie Dual  
Roomie Dual Wifi  
Eq 2

Art.no.: 115996, 115999, 116000, 116001

Compliance with valid versions of the following standards on the date on which the declaration of conformity was signed:

Safety standard:	EN 60335-1 EN 60335-2-80
EMF standard:	EN 62233
EMC standard:	EN 55014-1 EN 55014-2 EN 61000-3-2 EN 61000-3-3

Flexit AS 30.11.2016



Frank Petersen  
CED









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